

**Evaluation
of the
Louisiana Technology Initiatives:
2000- 2001**

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Evaluation of the Louisiana Technology Initiative: 2000 - 2001

EXECUTIVE SUMMARY

The Louisiana Technology Initiative expended approximately **\$12,088,297** on technology and staff development in public and non-public schools during the 2000-2001 school year. Of this amount, **\$2,430,076** came from the Classroom Based Technology Fund (CBTF) and **\$10,166,611.97** from the Technology Literacy Challenge Fund (TLCF). The CBTF funds were further divided, with \$2,101,097 allocated directly to Public Schools, \$13,081 going to state Special Schools, \$23,001 to Charter Schools, and \$292,897 awarded to Non-public Schools. From the TLCF moneys, \$3,863,285.31 went to public schools as part of the Technology Implementation Grants. \$3,079,935.76 was awarded as Professional Development Grants to consortia of districts and/or Dioceses and universities and \$690,000 went for High School Technology Leadership Awards. The nine Teaching, Learning, and Technology Centers were funded with \$2,025,000, to serve as regional extensions of LCET for professional development. Five percent of the \$10,167,818 TLCF funds received from the USDE, approximately \$508,391, was used for state level activities, mainly at the Louisiana Center for Educational Technology.

CBTF funds were distributed to districts and schools using an RFP procedure with allocations based on a per pupil basis. TLCF funds were competitively awarded to all districts based on high poverty need. Proposals were developed based on district/school technology plans that were approved by the state and which addressed the State Technology Goal and the four National Technology Goals. Funds were primarily used for professional development activities, but also for developing technology-rich instructional rooms, connecting to the Internet, and purchasing software and computer peripherals. The professional development activities emphasized the integration of technology into curricula, aligning curriculum to state content standards through technology, and most were based on the LA INTECH model developed by the LCET staff.

In June 2001, the student to computer ratio for public schools was 5.6:1, when considering all types of computers. Though this shows a slight increase from last year, the state has reduced the ratio from 48:1 in 1997, and brought it very close to the National goal of 5 students to each computer. For the non-public schools the ratio was 5.7:1. When only high-end computers are considered, the ratios showed decreases, with 7.4:1 for public and 7:1 for non-public schools compared to 8.2:1 for publics and 8.5:1 for non-publics last year. The state has made remarkable progress in this area, decreasing the ratio from 48:1 for both public and non-public schools in 1997. An impressive 66% of public and 68% of non-public schools has at least one computer in every instructional room.

The percentage of computers with Internet access increased in 2001 to 61% from 49% in 2000 for public and to 72% from 60% for non-public schools. Forty-five percent (45%) of public and 37% of non-public schools have at least one computer with Internet access in every instructional room. Ninety-four percent (94%) of the public schools have Internet access, the same as last year, while non-public school access dropped from 97% to 96%. Internet connections via direct link increased from 91% to 93% for public and from 77% to 87% for non-public schools this year.

The percentage of public school teachers at the beginner level in using technology has dropped from 33% in 2000 to 28% in 2001; non-public beginners remained at 24%. The public school intermediate levels of 48% showed a small gain while the non-public made a 1% gain from 48% to 49%; Instructor levels showed no change for either group, with public schools at 4% and non-publics at 5%. Concerning training and support for teachers, 72% of public and 64% of non-public schools reported having a person responsible for supporting teachers and assisting them with the integration of technology into the curriculum, an impressive gain for both groups. For public schools, 69% have a person who helps to maintain and support hardware and software in the schools, while 66% of non-publics have these personnel, an increase for both groups. Eighty percent (80%) of public and 65% of non-public schools are now requiring that teachers demonstrate technology skills for employment at their schools, up from 63% and 53% respectively.

Data show that 1,318 professional development sessions were presented in Louisiana involving 15,344 participants, of which 12,215 were teachers. Sessions were in the categories of: LA

INTECH, Integration of Technology, Application Software/Skills Training, Technical Support Training, and Administrative Training/Issues. Ratings on the overall effectiveness of training sessions on a scale of **A** to **F**, (A= Excellent and F = Did not meet expectations) revealed that 76% of participants rated the sessions Excellent, and 14% thought they were Good, indicating that participants were very pleased with the training sessions. LA INTECH, the state model for integrating technology into standards-based lessons, accommodated 2,624 public and non-public school educators. Each participant was trained to redeliver the model at the local level, and the standards-based lessons they developed were posted on LCET, TLTC, and district Web pages

All districts in the state, 90% of public schools, and 97% of non-public schools have technology plans. In 2000, 41% of public districts and 40% of dioceses and non-public schools revised their plans, and in 2001 67% of public and 72% of non-public school technology plans were revised. Goals were increasingly targeted at student achievement, and are beginning to connect school accountability and reform to the technology initiative.

Local efforts for installing technology infrastructure and training educators to use it effectively to improve student achievement are quite evident in school and district technology budgets. Public schools budgeted a total of \$2,793,489.06 for technology, which included computer hardware and other peripherals, software, professional development, telecommunications, networking, distance learning, and service and support. Non-public schools budgeted \$4,743,615.09 for technology. At the district level, public district technology budgets totaled \$65,131,440, up from \$64,672,958 in 1999-2000, and diocese budgets totaled \$1,094,759, down from \$2,122,623 last year. In addition, technology coordinators reported the dollar value of their E-rate discounts to be \$48,615,376, with \$48,443,677 for public school districts and \$171,699 for dioceses.

The Louisiana Technology Initiative for 2000-2001 has demonstrated significant gains compared to previous years. In the first four years, the Initiative was very successful in placing technology into classrooms, and providing rich resources and basic introductory training for faculties and staffs. In this fifth year, tremendous gains have been made in professional development of all educators for integrating technology into curricula and for using that training as a reform agent for all teaching and learning in Louisiana. State accountability plan measures, especially student achievement scores, appeared in plans and goals more than ever before, indicating that many districts and schools have the hardware and trained personnel in place, and are now focusing of real changes in teaching and improvements in student performances.

The Governor, Legislature, Board of Elementary and Secondary Education, Louisiana Department of Education, Louisiana Center for Educational Technology and participating businesses and industry are to be applauded for their vision, leadership, funding, and active support of this Initiative. The school children of Louisiana are the benefactors of this continuing program, and in subsequent years, the state at large. In order for this Initiative to support the State Accountability Plan, the stakeholders must continue to fund purchases of hardware and software, provide facilities, opportunities and funding for professional development and ensure that universities provide pre-service teacher education programs and partnerships with practicing teachers that ensure appropriate content area knowledge and skills to integrate technology into the curricula

Evaluation of the Louisiana Technology Initiative: 2000 - 2001

Results from data collected by Quality Education Data, Inc. (QED) 1997, 1998, 1999 and Louisiana Technology Surveys 2000, 2001											
GOAL	EVALUATION	RESULTS									
		Public Schools 1997	Public Schools 1998	Public Schools 1999	Public Schools 2000	Public Schools 2001	Non- Public Schools 1997	Non- Public Schools 1998	Non- Public Schools 1999	Non- Public Schools 2000	Non- Public Schools 2001
All educators and learners will have access to technologies that are effective in improving student achievement	Ratio of students to all computers in schools	8:1	8:1	6.0:1	5.5:1	5.6:1	11:1	8:1	6.7:1	6.3:1	5.7:1
	Ratio of students to high-end computers in schools	48:1 ¹	19:1	10.5:1	8.2:1	7.4:1	48:1 ¹	18:1	10.7:1	8.5:1	7:1
	Percent of computers with Internet access.	*	*	49%	54%	67%	*	*	61%	69%	79%
All teachers will have the training and support they need to help all students learn through computers and through the Information superhighway.	Percentage of schools that have a person responsible for providing teachers with support and assistance in integrating technology into the curriculum.	76%	77%	100%	67% ²	72%²	66%	99%	99%	59% ²	64%²
	• School-based	*	*	*	53.%	60%	*	*	*	81%	91%
	• Not school-based	*	*	*	80%	84%	*	*	*	35%	37%
	Percentage of schools that have a person who helps to maintain and support hardware and software in the school. based	82%	98%	*	62% ²	69%²	65%	99%	*	62% ²	66%²
	• School-based	*	*	*	38%	47%	*	*	*	68%	70%
	• Not school-based	*	*	*	86%	91%	*	*	*	55%	62%
	Estimated percentage of teachers at each skill level in the use of technology in instruction.	Percent	Mean Percent 3	Percent	Percent	Percent	Percent	Mean Percent ³	Percent	Percent	Percent
	• Non-User	*	*	*	7%	6%	*	*	*	5%	3%
	• Beginner	40%	50%	41%	33%	28%	38%	45%	37%	24%	24%
	• Intermediate	27%	37%	41%	43%	48%	26%	39%	44%	49%	49%
	• Advanced	8%	15%	18%	12%	14%	8%	18%	22%	18%	19%
	• Instructor	*	8%	8%	4%	4%	*	8%	8%	5%	5%

Data from QED Reports and Louisiana Technology Surveys

GOAL	EVALUATION	Public Schools 1997	Public Schools 1998	Public Schools 1999	Public Schools 2000	Public Schools 2001	Non-Public Schools 1997	Non-Public Schools 1998	Non-Public Schools 1999	Non-Public Schools 2000	Non-Public Schools 2001
All teachers and students will have a modern computer in their classrooms.	Percentage of computers in instructional rooms, computer labs and library media centers.	*	92%	93%	93%	94%	*	87%	87%	88%	90%
	Percentage of <u>instructional rooms</u> with Internet access	*	*	51%	55%	68%	*	*	63%	56%	68%
Every classroom will be connected to the information Superhighway.	Percentage of <u>schools</u> that have access to the Internet.	56%	84%	91%	94%	94%	58%	88%	92%	97%	96%
	• Percentage of these schools that have access to the Internet via direct link.	35%	49%	76%	91%	93%	15%	38%	61%	77%	87%
	• Percentage of these schools that have access to the Internet via dial-up link.	53%	40%	20%	9%	7%	80%	51%	33%	22%	12%
	• Percentage of these schools that have access to the Internet by satellite	*	*	0.2%	0.2%	0.3%	*	*	0.9%	0.9%	1%
	Percentage of <u>computers</u> with Internet access in instructional rooms.	*	*	24%	49%	61%	*	*	24%	60%	72%
	Percentage of <u>schools</u> that have computers in class-rooms, labs, or Media Center(s) connected through LANs (local area networks)	33%	64%	77%	72%	79%	27%	57%	71%	74%	83%
	Percentage of <u>schools</u> that are connected to another school or schools through a WAN (wide area	27%	68%	66%	62% ⁴	65%⁴	6%	30%	13%	14% ⁴	13%⁴

Data from QED Reports and Louisiana Technology Surveys

GOAL	EVALUATION	Public Schools 1997	Public Schools 1998	Public Schools 1999	Public Schools 2000	Public Schools 2001	Non-Public Schools 1997	Non-Public Schools 1998	Non-Public Schools 1999	Non-Public Schools 2000	Non-Public Schools 2001
	network).										
Effective and engaging software and on-line resources will be an integral part of every school curriculum.	Percentage of <u>schools</u> with <u>students</u> who participate in distance learning	*	38%	17%	10%	11%	*	25%	13%	9%	8%
	Percentage of <u>schools</u> with teachers who participate in distance learning.	*	*	23%	14%	19%	*	*	22%	14%	12%
Every system or independent school will engage in long range planning for technology in the schools.	Percentage of schools that have a technology plan	73%	90%	94%	86%	90%	58%	88%	92%	93%	97%
	Percentage of schools that have reviewed their plans for technology within the last year	87%	99%	78%	68%	74%	94%	97%	75%	83%	81%

* Data were not collected.

¹ Ratios for 1997 included 486 type computer, whereas later years did not.

² Data for 2000 and 2001 represent school-based only; school and district persons counted in previous years

³ Results were presented in a different format

⁴ Data for first three years represented both school and administration buildings. Data for 2000 and 2001 represent schools only.

Professional Development for Louisiana Educators

Data from Evaluation of Training Form

Total Training Sessions in the State	1,318
Total Educators Participating in Training Sessions	15,344

Number of Participants Completing Evaluations									
	Teachers	School Admin.	Paraprofessionals	Parents	University	Central Office Admin.	Support Staff	Dept. of Educ.	Total
All Sessions in 2000-2001	12,215	1,486	411	100	30	238	821	33	15,344
LA INTECH	2,478	56	26	1	4	16	36	7	2,624
Application Software/Skills Training	609	46	38	16	1	16	130	1	857
LEADTech	0	353	0	0	0	20	0	1	374
K-12 On-line Resources	281	16	9	0	0	3	4	0	313
Marco Polo	175	8	12	0	0	3	5	0	203
Making Connections	83	3	0	0	0	2	1	0	89

Levels of Technology Expertise				
	Beginner	Intermediate	Advanced	Instructor
All Sessions in 2000-2001	32%	54%	11%	4%
LA INTECH	25%	59%	13%	3%
LEADTech	29%	61%	9%	1%
Application Software/Skills Training	48%	45%	6%	0.8%
K-12 On-line Resources	32%	54%	10%	4%
Marco Polo	23%	54%	18%	5%
Making Connections	31%	44%	13%	11%

Ratings for All Professional Development Sessions			
A = Excellent B = Good C = Satisfactory D = Unsatisfactory F = Did not meet expectations			
	Percentages		
	A	B	C
1. Information was presented in an organized manner.	78%	14%	6%
2. Handouts were useful.	79%	12%	8%
3. Training materials were appropriate to participants' level of experience.	73%	16%	10%
4. Trainer presented information in well-organized manner.	81%	11%	8%
5. Overall effectiveness of training session.	76%	14%	10%

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Evaluation of the Louisiana Technology Initiative: 2000 - 2001

BACKGROUND AND SETTING

The Louisiana Technology Initiative had its inception in 1987 when the state first received funds for the **Louisiana Educational Quality Support Fund (LEQSF)** commonly called the **8(g)** fund. In 1994 a \$78,000 technology grant was awarded under the **GOALS 2000: Educate America Act** to form the **Louisiana GOALS 2000 Program**, which existed as such from July 1994 through December 1995. Through a **National Science Foundation (NSF)** grant to the **Louisiana Systemic Initiative Program (LASIP)**, the **Louisiana Networking In Education (LANIE)** project was implemented, focusing on putting technology into Louisiana classrooms. In 1995 the state was awarded a \$4.3 million **Technology Innovative Challenge Grant** by the U.S. Department of Education to design model technology programs at five pilot sites. This was a major milestone in the focus on technology as a reform tool for changing pedagogy in Louisiana schools.

In January 1996, The Louisiana GOALS 2000 program was renamed **Louisiana LEARN for the 21st Century: An Educational Initiative (LA LEARN)** and a comprehensive reform effort to develop a long-term improvement plan for all aspects of the state educational system was created. The Louisiana Board of Regents, State Department of Education, the **Board of Elementary and Secondary Education (BESE)**, and LASIP worked together to develop a State Education Plan, with technology as a major state objective. **LA LEARN** came under the auspices of the newly created **Louisiana Education Achievement and Results Now (LEARN) Commission**, in March 1996, which proposed that various educational and legislative entities in the state begin planning for the incorporation of technology into the educational process in schools at all levels.

The state applied for and received \$5.3 million of **Technology Literacy Challenge Fund (TLCF)** funds for the 1997-98 school year in the spring of 1996, to be used for meeting the mandates of the National Technology Goals. **The Classroom-Based Technology Fund (CBTF)** was also established and funded, that year by the Louisiana State Legislature, providing another \$38.2 million for the integration of technology into all Louisiana classrooms. A comprehensive plan for impacting all schools and levels of education in the state was developed. It included the development and adoption of the State Technology Plan, the establishment of the **Louisiana Center for Educational Technology (LCET)** in the **Louisiana Department of Education (SDE)**, the passage of legislation for providing state funding for technology, defining allocation formulas, and the development of an application process for distributing both state and federal funds equitably.

During the 1998 regular session, the Louisiana Legislature once again allocated moneys for **The Classroom-Based Technology Fund (CBTF)**, amounting to \$25 million for the 1998-99 school year. Louisiana was also awarded a \$10.2 million federal **Technology Literacy Challenge Grant (TLCF)** to provide for training and professional development to help ensure successful integration of technology in the classroom and to meet the mandate of the National Technology Goals.

In 1999, the Technology Initiative was continued when the Louisiana Legislature allocated \$14,037,250 for **The Classroom-Based Technology Fund (CBTF)** and the federal government awarded to Louisiana \$10,592,272 in federal **Technology Literacy Challenge Grant (TLCF)** funds.

The Louisiana Center for Educational Technology (LCET) was created within the Louisiana Department of Education to administer the funds and carry out the mandates of the

granting agencies. Dr. Carol Whelan was appointed Director of LCET and continued in that role until the spring of 2000, when she became Assistant Superintendent of Quality Educators. At present, Sheila Talamo is serving as Director of LCET. Louisiana is continuing its commitment to improve education through the integration of technology and learning through the awarding of grant moneys to districts, private schools and professional development consortia to continue efforts to carry out the State Educational Technology Goal:

"All educators and learners will have access to technologies that are effective in improving student achievement".

SOURCES OF FUNDING

Technology Literacy Challenge Fund

Congress passed the ***Improving America's Schools Act (IASA)*** in 1994 to provide support for key elements of systemic education improvement efforts. Technology's potential for helping to accomplish these reforms by broadening teacher and student access to educational resources and accelerating student learning was quickly recognized. The result is ***Title III, Technology for Education***. The broad purpose of Title III is to help develop and support "a comprehensive system for the acquisition and use by elementary and secondary schools in the United States of technology and technology-enhanced curricula, instruction, and administrative support resources and services to improve the delivery of education services" (ESEA, Title III, Part A, section 3112).

Programs and activities funded under Title III include the ***School Technology Resource Grants (Technology Literacy Challenge Fund)***, that funds states and local school districts to use technology for implementing educational technology plans to improve teaching and learning. The *TLCF* was first funded in fiscal year 1997, two years after the development of the national technology plan and the four pillars, which provide a focus for infusing technology effectively into classrooms to improve teaching and learning. The focus of the *TLCF* is on professional development, with at least 95 percent of funding provided to local educational agencies (LEAs). The requirements in the authorizing statute are intended to ensure that LEAs use their funds in ways likely to lead to improved classroom instruction and student achievement.

Louisiana was awarded **\$10,167,818** from this fund in 2000. Five percent of the total Louisiana TLC funds, **\$508,390.90**, was used by the Louisiana Center for Educational Technology for administrative costs, including staffing, technical assistance workshops, professional development institutes, developing materials, etc., associated with the federal *TLCF* program and the state CBTF program. The adjusted budget available for schools was **\$9,658,221.07**. States receiving these funds were strongly encouraged to marshal together resources at all levels -- local, state, federal, and the private sector -- in a systemic plan of action to meet the President's four goals and to describe in their statewide technology plans how they would address those goals. They were encouraged to draw on several other federal resources, including *the Technology Innovation Challenge Grants*, the *Universal Service Fund*, *six Regional Technology in Education Consortia*, *Statewide NetDay events*, *Tech Corps*, the *21st Century Teachers*, and the *American Technology Honor Society*. Several requirements were attached to the application, including:

- the state had to have a state technology plan;

- assistance to school districts with the highest numbers or percentages of children living in poverty and with the greatest need for technology to improve teaching and learning had to be a priority;
- Section 427 of the General Education Provisions Act (GEPA), which requires that applicants describe how they will ensure equitable access to, and participation in, its federally assisted program for students, teachers, and other program beneficiaries with special needs, had to be honored;
- provision for children and teachers in state-approved non-public schools to participate in the development of plans for professional development and actual professional development activities.

Full details can be found at <<http://www.ed.gov/Technology/TLCF/>>

Classroom-Based Technology Fund

The Classroom-Based Technology Fund was established by House Bill No. 1911 during the Regular Session, 1997 to enact R.S. 17:3921.2, to provide moneys for the fund, to create the **State Technology Advisory Committee (STAC)** to oversee it, and to develop procedures and guidelines relative to the awarding of the grant funds. The bill provided \$38,200,000 in 1997 "for the purpose of improvement of student learning through technology within Louisiana's school districts", and included charter schools approved by school district boards or by the state chartering authority, all elementary and secondary schools operated by the Board of Elementary and Secondary Education (BESE), elementary and secondary schools operated by Louisiana State University, Southern University and the Department of Public Safety and Corrections, the Louisiana School for Math, Science and the Arts, and all certified elementary and secondary non-public schools. The initiative was refunded during regular sessions in 1998 for \$25 million and 1999 for \$14,037,250. For the present school year, 2000-2001, the legislature provided \$2,500,000 to continue the technology initiative.

APPLICATION PROCESS

Under the advisement of director Chris O'Neal and the staff at the Louisiana Center for Educational Technology, plans were developed and executed for :

- the awarding of the CBTF and TLCF grant moneys to public school districts, Diocesan systems, non-public schools and special state schools;
- the awarding of TLCF funds for district and school activities and regional Professional Development Centers;
- design and delivery of exemplary professional development models for integrating technology into classrooms;
- leadership, guidance and assistance to districts, consortia, and non-public schools for meeting mandates of the funding entities and applications.

Two types of technology grants were designed for the 2000-2001 funding period:

- 1) CBTF/TLCF Technology Improvement Grants, and
- 2) TLCF Professional Development/Leadership Grants.

CBTF moneys were used to award **Technology Improvement Grants (TIGs)** to school systems (LEAs and Diocesan systems) and to independent schools (special schools, laboratory schools, and state-approved charter and non-publics). TLCF moneys were competitively awarded in two categories: (a) as a component of Technology Improvement Grants awarded to LEAs and independent public schools, and (b) as the sole funding source for the TLCF Professional Development/Leadership Grants to individual LEAs and to consortia composed of one or more LEAs and special, non-public, and private

schools, institutions of higher education, libraries, or other educational entities appropriate to local programs.

CBTF/TLCF Technology Improvement Grants

The Application Packet for Technology Improvement Grants (See *Appendix A - Louisiana's Classroom-Based Technology Fund and Technology Literacy Challenge Fund Application Packet for Technology Improvement Grants 2000-2001*) combined the two funds, with the Classroom-Based Technology Fund (CBTF) moneys targeted at the purchase of equipment. Funds were allocated for all public and state approved nonpublic schools and determined by using a formula based solely on student population. (See *Appendices C and E -Allocations*).

The federally funded Technology Literacy Challenge Fund (TLCF) funds were awarded on a competitive basis to **public** local education agencies and independent public schools only, as per federal guidelines. Moneys could be used for all items identified for CBTF funds and for professional development activities, including college tuition, stipends, salaries, substitutes, professional services, conferences, etc. Applicants who qualified and met the competitive standards of the RFP were awarded grants up to a maximum amount based on the number and percentage of students living in poverty as represented in district free-lunch counts on file in the Louisiana Department of Education. (See *Appendix D Louisiana Technology Literacy Challenge Fund Professional Development/Leadership Grants Allocations 2000-2001* for designated amounts.) Specific requirements related to the provision of assistance to school districts with high numbers and percentages of children living in poverty and with the greatest need for technology had to be addressed in the applications. Also, as stipulated in TLCF guidelines, children enrolled in private schools, as well as their teachers and other educational personnel had to be provided an opportunity to participate in the program on an equitable basis.

The Application addressed the following funding and instructional priorities

- maximizing the use of technology to a great extent among a targeted number of students in classrooms and schools with a *genuine need* for expanded technologies and with *genuine commitment to effectively integrate technology* into the curriculum to improve student learning;
- support of local school system preparations for educational accountability;
- making strong connections with system/school improvement plan(s).
- focusing on one or more of the following curriculum areas: mathematics, science, reading, language arts, or social studies.
- limiting the number of schools or grade levels impacted by the grant
- addressing one or more of the purposes/models provided in the packet.

Applicants were also required to have school plans for technology at impacted schools, annual updates of the system technology plan, demonstrate increasing commitments to achieving the state technology goal and the national technology goals through the establishment of a **Teaching, Learning, and Technology Council (TLTC)**. The councils would also be expected to increase coordination of federal (Title I, II, VI) and state funds to support teaching, learning, and technology, establish and maintain electronic communication connections to the Internet for EVERY school and all district and school technology leaders, and provide ongoing technical and instructional support to teachers and staff.

TLCF Professional Development/Leadership Grants

A major focus of the 2000-2001 initiative was the development and implementation of professional development programs for teachers, administrators, and other educators. Toward this end, approximately \$9,658,221 of TLCF funds was awarded for three types of grants. Grants were aimed at enhancing ongoing efforts to improve teaching and learning using technology and supporting local school systems in preparations for the state's educational accountability program and targeted school improvement efforts. Applicants were required to address how the populations/schools targeted in the application "qualified" as areas with "high numbers of children living in poverty and with the greatest need for technology" as required in TLCF guidelines. The Application Packet for the Professional Development/Leadership Grants (See Appendix B - *Louisiana Technology Literacy Challenge Fund State Grants - Application Packet for Professional Development/Leadership Grants 2000-2001*) offered up to \$420,000 to consortia, which could consist of various combinations of districts, TLTC centers, and universities, or in the case of High School Technology Leadership Awards, a single district.

Applications had to be submitted by Local Education Agencies (LEAs) that had formed consortia with partners, which could include other LEAs, special schools, nonpublic systems, private schools, institutions of higher education, businesses, academic content experts, museums, libraries, public broadcasting stations, or other appropriate organizations. State-approved non-public schools, though not eligible for these funds, had to be provided opportunities to participate. Grantees were required to provide professional development activities on the integration of technology into a standards-based curriculum to educators in their geographic areas.

Three types of proposals were accepted:

1. **Teaching, Learning, and Technology Center (TLTC) Continuation Awards.** Nine regional **Teaching, Learning, and Technology Centers (TLTC)** established between 1999-2000, were eligible to compete for awards of \$225,000 each that would allow them to sustain and expand the delivery of professional development training on the integration of technology into a standards-based curriculum. Grants were awarded for two-year periods contingent upon continued funding.
2. **District/Consortium Professional Development Grants.** School districts could apply alone or in consortia with other districts for funds to improve district- and school-level professional development programs. Grants ranged from \$90,000 for individual districts to \$420,000 for consortia with four or more districts. Grants were awarded for two-year periods contingent upon continued funding.
3. **High School Technology Leadership Grants.** Projects were to target secondary school redesign, namely an improved secondary school system offering clear multiple pathways for all Louisiana youth, including those choosing to immediately begin full-time employment, those who enter an apprenticeship or a two-year college, or those who pursue a four-year degree. Professional development training for secondary instructors and student technology leadership training to support proposed redesign efforts had to be integral components of the project. Ten awards for a maximum of \$100,000 were to be awarded.

REVIEW PROCESS

LCET developed timelines for submitting proposals for the *Technology Improvement Grants* and the *Professional Development/Leadership Grants*, as well as dates for

reviewing the proposals, submitting them to the State Technology Advisory Committee (STAC) and then to the BESE board for approval.

For the *Technology Improvement Grants*, reviewers who possessed technical and instructional expertise were selected and each team was assigned a contact person from the LCET staff who worked closely with them to answer questions and resolve problems. Applications were classified as "Full Approval", "Approval Contingent Upon Modifications" or "In Need of Further Development". LCET staff worked closely with applicants who did not receive full approval in making required revisions. The applications that were approved with contingencies were fully approved as soon as the revised applications were received and reviewed by the LCET staff for compliance with the recommendations, then sent to the STAC and BESE for approval.

Those needing further development had to re-develop their applications according to the review teams' suggestions and resubmit them by November 9, 2000. Contact persons from the LCET staff were assigned to each review team to assist with the modifications.

All deadlines established for 2000-2001 Technology Initiative were met as scheduled. Each of the 66 public school districts, seven Diocesan systems, 26 non-public schools, eight special state schools, and twelve charter schools were approved for funding.

Expert review panels with in-state members reviewed the *Professional Development/Leadership Grant* proposals for three different types of grants: (1) Teaching, Learning, and Technology Center Continuation Awards, (2) District/Consortium Professional Development Grants, and (3) High School Technology Leadership Awards. The first round of applications, in June 2000, focused on the TLTC Continuation Awards and were awarded to the nine regional Teaching, Learning and Technology Centers in geographically distributed areas of the state, with at least one in each region. These centers serve as extensions of the state's Louisiana Center for Educational Technology, provide technology integration training opportunities for teachers from every district in the state, and actively collaborate with universities and Regional Educational Service Centers (RESC).

The second round of applications, in July 2000, focused on District/Consortium Professional Development Grants, and High School Technology Leadership Awards. Expert review panels consisting of out-of-state members reviewed the applications and placed them in one of three categories: (1) Strongly Recommended for Full Funding; (2) Recommended for Partial Funding; (3) Not Recommended for Funding. For each proposal, the panel identified strengths, weaknesses, and suggestions for improvement. Maximum funding amounts were identified in the application packet and were based on the type of professional development award and/or the number of districts involved in a consortium. Fifteen (15) proposals were recommended for full funding, four (4) were recommended for partial funding, and eight (8) proposals were not recommended for funding. A total of nineteen proposals, involving 48 of Louisiana's LEA's, received funding during this second round: twelve (12) were District/Consortium Professional Development Grants and seven (7) were High School Technology Leadership Grants.

FUNDS DISTRIBUTION

Districts, state schools and consortia were awarded **\$12,088,297.07** for the 2000-2001 school year, with \$2,430,076.00 coming from the state CBTF and \$9,658,221.07 from the federal TLCF. Each of the 66 public school districts and four state schools received these funds as a component of the *Technology Improvement Grants*. [The funds provided a per-pupil distribution of XXX for xxxx public school students.](#) Twelve Charter

schools and 26 private schools were allocated funds, but none chose to participate. Six Catholic dioceses received \$257,007.00, with the seventh declining to participate. (See *Appendix C - Classroom-Based Technology Allocations for Public Schools Fiscal Year 2000-2001*; and *Appendix E Classroom Based Technology Allocations for Nonpublic Schools 2000-2001*).

Of the total **\$10,167,818.00** Technology Literacy Challenge Grant, **\$3,863,285.31** was awarded competitively to the 66 public school districts, and four state schools as a component of the *Technology Improvement Grants*. The awards were based on high poverty need, with a per pupil allocation of **\$6.62**. Twenty-eight Professional Development Grants totaling **\$5,794,935.76** were awarded to districts and consortia for providing additional technology training for Louisiana educators. Professional Development Grant Awards for 2000-2001 can also be found on-line at <http://www.doe.state.la.us/DOE/lcet>. The remaining **\$508,390.90** covered administrative costs at the Louisiana Center for Educational Technology.

Funds were awarded to applicants who had been approved by the Department of Education, State Technology Advisory Committee, and the Board of Elementary and Secondary Education (BESE).

GOALS AND OBJECTIVES

In an effort to improve student performance and better prepare students for the future work force, a united effort was initiated to provide students in Louisiana schools with greater access to technology. In the development of a State Plan for Technology, the various stakeholders and agency representatives chose one state goal and adopted the four national goals. They are:

State Technology Goal

- ♦ All educators and learners will have access to technologies that are effective in improving student achievement.

National Technology Goals

- ♦ All teachers will have the training and support they need to help all students learn through computers and through the information superhighway.
- ♦ All teachers and students will have modem computers in their classrooms.
- ♦ Every classroom will be connected to the information superhighway.
- ♦ Effective and engaging software and on-line resources will be an integral part of every school curriculum.

EVALUATION DESIGN

The Evaluation design was influenced by several factors at both the state and national levels. At the state level, surveys that had been designed for the 1999-2000 evaluation received minor revisions and were used again. At the national level, the USDE is using an on-line data base which requires subgrantees to enter data about their TLCF grants, so the state on-line report was designed to match it closely.

The design of the 2000-2001 Evaluation of the Louisiana Technology Initiatives was four-fold. One, the availability and extent of the use of technology in state schools is always important to stakeholders. For collecting these data, the Evaluation team made minor revisions to their previously designed instruments, ***The Louisiana District Technology Survey*** and ***The Louisiana School Technology Survey***. These surveys collect data on a variety of fronts, including number and types of computers in schools and classrooms, connections to the Internet, skill level of teachers and administrators, funding for technology, and extent of technology planning. Items were grouped around the State Technology Goal and the four National Technology Goals to aid in reporting the extent to which each had been attained. Principals from every public and non-public school in the state and technology coordinators from each district and state school were required to submit the on-line surveys. The forms can be found in *Appendix F - The Louisiana District Technology Survey* and *Appendix G - The Louisiana School Technology Survey*, as well as on-line at:

<http://www.lcet.doe.state.la.us/submissions/TechSurvey/index.asp>

Two, the professional development survey form provides data on all professional development sessions pertaining to technology in the state. The form solicits information about types of participants and training, provider of the training, grade level and subjects taught, level of expertise, and also requires respondents to assign grades that indicate

the effectiveness of the presentation and the session in general. A copy of the **Evaluation of Training Form** is found in *Appendix H*, as well as on-line at: <http://www.lcet.doe.state.la.us/submissions/>.

Three, the **End of Year Report** (EOY) forms collect data required by the USDE on their on-line data collection instrument, the **Technology Literacy Challenge Fund Performance Report for Subgrantees**. These forms are completed by technology coordinators for each district, consortia, state school, diocese, and non-public school that receives CBTF moneys, and address the extent to which the State Technology Goal and the national Four Pillars were met. They require entry of the subgrantees' goals, strategies, measures, baseline and current status of actions, as well as the anticipated status by September 2002. Districts serving as fiscal agents for Consortia and regional Teaching, Learning, and Technology Centers, and High School Technology Leadership Awards were also required to submit data pertaining to the use of Technology Literacy Challenge Funds. The *End of Year Report for Districts and State Schools*, can be found in *Appendix I* and the *End of Year Report for Non-Public Schools and Professional Development/Leadership Grants* can be found in *Appendix J*, as well as on-line at: <http://www.lcet.doe.state.la.us/submissions/>.

Four, the **End of Year Report for the Louisiana Center for Educational Technology** form is completed by the Director and staff of LCET to assess the extent that objectives of the State Technology Plan have been met as well to collect data needed for the **Technology Literacy Challenge Fund Performance Report for States**.

All information was submitted on-line and collected in databases on the LCET servers. Completed forms were then posted on the Louisiana Department of Education Web page at <http://www.lcet.doe.state.la.us/submissions/> and provided a venue for sharing ideas and accomplishments and verifying which reports had or had not been completed. All of these databases were used to ascertain the change in availability and use of technology in 2000-2001 compared to the four previous years. The following section entitled *Data Analysis and Results* contains the various analyses and reports.

DATA ANALYSIS AND RESULTS

Louisiana Technology Surveys 2000-2001

In the first three years of the Initiative, the Louisiana Department of Education and Quality Education Data (QED) collaborated on the design and implementation of three statewide surveys. The purpose was to establish a baseline for the evaluation of a statewide initiative to enhance the use of technology in all Louisiana classrooms, both public and non-public. Yearly reports provided information on the infrastructure/connectivity of schools to the Internet, availability of hardware and software in instructional settings, the integration of technology into the curriculum, planning for technology integration, and the collaboration between districts and schools with parents, the community, and industry.

In 2000, the Evaluation Team created new surveys for gathering these data and used them again this year. The **Louisiana School Technology Survey** was completed by **1468** public schools for a **97.6%** rate of response. Two hundred two (**202**) non-public schools responded, including the schools in the seven Catholic dioceses and 5 non-public schools outside of the dioceses. All grantees were told that subsequent funding for technology would depend on the completion of these forms, which could explain the high rate of completed surveys. In some areas, however, this success may be responsible for drops in percentages, as more surveys were completed, and respondents were more

aware of the need for accuracy in their reporting because they knew that submitted forms would be posted on the Internet. **Louisiana School Technology Survey** reports for schools can be accessed on-line by following the district links at <http://www.lcet.doe.state.la.us/submissions/tech/DistrictsDataList.asp> and then selecting individual schools.

Results

Questions on the surveys were clustered to provide indicators of attainment of the State Technology Goal, the four National Goals, and the state directive requiring districts and schools to engage in long and short-range planning for technology in the schools. All data in **Table 1**, below, is from the school surveys, except the items pertaining to the district Technology budgets, which came from the district surveys. Complete results of the surveys can be seen in *Appendix L – A Comparison of Louisiana School Technology Surveys 1999-2000 and 2000-2001* and *Appendix M – A Comparison of Louisiana District Technology Surveys 1999-2000 and 2000-2001*

State Technology Goal:

All educators and learners will have access to technologies that are effective in improving student achievement.

Indicators aligned to the State Technology Goal show that the state is making admirable progress in attaining this goal. As seen in **Table 1** below, the ratio of students to all types of computers for public schools is **5.6:1** in 2001. The ratio has reduced from 8:1 in 1997, bringing it very close to the National goal of 5 students to each computer. In non-public schools the current ratio is **5.7:1** compared to 11:1 in 1997. When only high-end computers are considered, the student to computer ratio for public schools is now **7.4:1** compared to 48:1 in 1997, 19:1 in 1998, and 10.5:1 in 1999, and 8.2:1 in 2000. For non-public schools, this ratio is **7:1** compared to 48:1 in 1997, 18:1 in 1998, and 10.7:1 in 1999, and 8.5:1 in 2000.

The percentage of computers with Internet access in public schools has increased to **67%** from 54% in 2000, and to **79%** from 69% in 2000 for non-public schools.

National Pillar 1

All teachers will have the training and support they need to help all students learn through computers and through the information super highway.

Approximately **72%** of public and **64%** of non-public schools provide assistance to teachers in integrating technology into the curriculum, with increases of five (5) percentage points since last year for each. Concerning training and support for teachers, **60%** of public schools reported having a school-based person responsible for supporting teachers and assisting them with the integration of technology into the curriculum, while **84%** have persons who are not school-based, such as district or classified staff members. For non-public schools, the percentages were **91%** school-based in 2001 and 81% in 2000, **37%** employed non-school based persons for supporting teachers efforts at integrating technology.

The reported skill levels for the use of technology show percentages of beginners decreasing from 33% in 2000 to **28%** in 2001, and Intermediates increasing from 44% in 2000 to **48%** in 2001. The Advanced level showed a small increase for public schools, from 12% to **14%**, and 18% to **19%** for non-publics. In the Instructor category, percentages remained at the same level in both public and non-public schools.

To assist educators in their professional development efforts, **68%** of schools and **83%** of districts are providing training for upgrading technology and computer skills, and **58%**

of schools provide release time for teachers to participate in training. Eighty-five (**85%**) percent of non-public schools and **56%** of dioceses provided training, while **79%** provide release time. An increase of 17% is noted in the percent of schools requiring teachers to demonstrate technology skills for employment, from 63% to **80%**. Non-publics increased 12%, from 53% to **65%**.

National Pillar 2

All teachers and students will have modern computers in their classrooms.

Schools have made remarkable progress in accomplishing this goal, with a 55% increase since last year in the percent of public schools having at least one computer in every instructional room. Sixty-six (**66%**) of public and **68%** of non-public schools reported accomplishing this objective, while **48%** of public and **50%** of non-publics have at least one Power PC/Pentium class multimedia computer in every instructional room.

The percentage of computers in instructional rooms, computer labs and library media centers showed a small increase, from 93% in 2000 to **94%** in 2001 and instructional rooms with Internet access increased to **68%** in 2001 from 55% in 1999. For non-publics, the percentage of computers in instructional rooms increased 2% to **90%** in 2001, and rooms with Internet access increased 12 percentage points to **68%** in 2001.

There are 103,474 Power PC/Pentium class computers in the state's public school instructional rooms, which includes classrooms, computer labs, and Library/Media Centers, for an average of 70.49 per school. Non-publics schools averaged 59.65 per school.

National Pillar 3

Every classroom will be connected to the information superhighway.

Results concerning computers with Internet access in instructional rooms, labs, and library/media centers were very impressive, with public schools increasing an average of 15.56 per school from 45.68 in 2000 to **61.24** in 2001; non-publics increased from 46.21 to **57.74** in the same period. Pertaining to schools accessing the Internet, access by dial-up link decreased from 9% to **7%** for publics and from 22% to **12%** for non-publics, while more efficient access by direct link for publics increased from 91% to **93%** and for non-publics from 77% to **87%** in the same period.

Connections through local area networks (LANs) increased in 2001, from 72% to **79%** for public schools, and from 74% to **83%** for non-publics. Public school connections through wide-area networks (WANs) increased from 62% to **65%** for publics and dropped 1% to **13%** for non-publics. The fact that 2000 figures represented connections for both administrative and school use make the gains more impressive, and in fact larger.

National Pillar 4

Effective and engaging software and on-line resources will be an integral part of every school curriculum.

Distance learning became an area of increased interest this year as new courses were made available and the Louisiana Virtual Classroom project provided grants and training to teachers to develop on-line courses. Eleven (**11%**) percent of Louisiana's public schools and **8%** of non-publics have students participating in these projects. Most were taking the Telelearning courses with 1,838 public school and 164 non-public students. Web-based Learning was the next largest category with 1815 public and 212 non-public school students. Satellite classes had 1492 students from public schools and 325 from non-public schools. During the 2000-2001 school year, 55 public schools had teachers who

participate in distance learning an increase from 14% to **19%**. The percentage decreased from 14% to **12%** for non-public school teachers.

Ninety-six percent (**96%**) of public schools reported that their teachers utilized web resources for instructional support and activities and **76%** purchased software for use in instructional rooms last year. For non-publics, the percentages were **99%** and **86%**, respectively. Ninety-one percent (**91%**) of public school teachers reported using the Louisiana Department of Education Web site, **86%** used on-line libraries and databases, and **93%** used other Web sites. For non-public schools the percentages were **71%** using LDE Web site, **90%** using on-line libraries and databases, and **96%** using other Web pages. Compared to last year, the large increases in percentages reveal much interest and advancement in accomplishing National Pillar Four.

State Directive

Every system or independent school will engage in long range planning for technology in the schools.

Long-range planning for technology has been instrumental to the tremendous gains since the statewide technology initiatives began in 1997. Long-range District Technology Plans were required in the Application for CBTF/TLC funds, so 100% of the Districts have answered affirmatively to this question for several years. Concerning School Technology Plans, there was an increase from 86% last year to **90%** in 2001. Forty-one percent (**46%**) of public schools and **44%** of non-public schools wrote plans for two to four years and approximately **67%** of public and **72%** of non-public schools revised their plans in 2001.

The total budgeted for technology from funds generated by the schools, such as PTO funds, amounted to **\$2,793,489.06** for publics and **\$4,743,615.09** for non-publics, indicating a very strong interest and commitment to the integration of technology into the teaching and learning process. Districts budgeted \$6,513,440 for instructional and administrative technology in 2000-2001, while diocese budgets totaled **\$1,094,759.00**. In addition, districts reported the dollar value of their E-rate discounts to be **\$48,443,677** for the 2000-2001 school year. Dioceses reported receiving discounts of **\$171,699.00**.

Table 1

Results from data collected by Quality Education Data, Inc. (QED) 1997, 1998, 1999 and Louisiana Technology Surveys 2000, 2001											
GOAL	EVALUATION	RESULTS									
		Public Schools 1997	Public Schools 1998	Public Schools 1999	Public Schools 2000	Public Schools 2001	Non-Public Schools 1997	Non-Public Schools 1998	Non-Public Schools 1999	Non-Public Schools 2000	Non-Public Schools 2001
All educators and learners will have access to technologies that are effective in improving student achievement	Ratio of students to all computers in schools	8:1	8:1	6.0:1	5.5:1	5.6:1	11:1	8:1	6.7:1	6.3:1	5.7:1
	Ratio of students to high-end computers in schools	48:1 ¹	19:1	10.5:1	8.2:1	7.4:1	48:1 ¹	18:1	10.7:1	8.5:1	7:1
	Percent of computers with Internet access .	*	*	49%	54%	67%	*	*	61%	69%	79%
All teachers will have the training and support they need to help all students learn through computers and through the Information superhighway	Percentage of schools that have a person responsible for providing teachers with support and assistance in integrating technology into the curriculum.	76%	77%	100%	67% ²	72%²	66%	99%	99%	59% ²	64%²
	• School-based	*	*	*	53%	60%	*	*	*	81%	91%
	• Not school-based	*	*	*	80%	84%	*	*	*	35%	37%
	Percentage of schools that have a person who helps to maintain and support hardware and software in the school, based	82%	98%	*	62% ²	69%²	65%	99%	*	62% ²	66%²
	• School-based	*	*	*	38.4%	47%	*	*	*	68%	70%
	• Not school-based	*	*	*	86%	91%	*	*	*	55%	62%
	Estimated percentage of teachers at each skill level in the use of technology in instruction.	Percent	Mean Percent ³	Percent	Percent	Percent	Percent	Mean Percent ³	Percent	Percent	Percent
	• Non-User	*	*	*	7%	6%	*	*	*	5	3%
	• Beginner	40%	50%	41%	33%	28%	38%	45%	37%	24%	24%
	• Intermediate	27%	37%	41%	43%	48%	26%	39%	44%	49%	49%
	• Advanced	8%	15%	18%	12%	14%	8%	18%	22%	18%	19%

Table 1 - Data from QED Reports and Louisiana Technology Surveys

GOAL	EVALUATION	Public Schools 1997	Public Schools 1998	Public Schools 1999	Public Schools 2000	Public Schools 2001	Non-Public Schools 1997	Non-Public Schools 1998	Non-Public Schools 1999	Non-Public Schools 2000	Non-Public Schools 2001
	• Instructor	*	8%	8%	4%	4%	*	8%	8%	5%	4.9%
All teachers and students will have a modern computer in their classrooms.	Percentage of computers in instructional rooms, computer labs and library media centers.	*	92%	93%	93%	94%	*	87%	87%	88%	90%
	Percentage of <u>instructional rooms</u> with Internet access	*	*	51%	55%	68%	*	*	63%	56%	68%
Every classroom will be connected to the information Superhighway.	Percentage of <u>schools</u> that have access to the Internet.	56%	84%	91%	94%	94%	58%	88%	92%	97%	96%
	• Percentage of these schools that have access to the Internet via direct link.	35%	49%	76%	91%	93%	15%	38%	61%	77%	87%
	• Percentage of these schools that have access to the Internet via dial-up link.	53%	40%	20%	9%	7%	80%	51%	33%	22%	12%
	• Percentage of these schools that have access to the Internet by satellite	*	*	0.2%	0.2%	0.3%	*	*	0.9%	0.9%	1%
	Percentage of <u>computers</u> with Internet access in instructional rooms.	*	*	24%	49%	61%	*	*	24%	60%	72%
	Percentage of <u>schools</u> that have computers in class-rooms, labs, or Media Center(s) connected through LANs (local area networks)	33%	64%	77%	72%	79%	27%	57%	71%	74%	83%
	Percentage of <u>schools</u> that are connected to another school or schools through a WAN (wide area	27%	68%	66%	62% ⁴	65% ⁴	6%	30%	13%	14% ⁴	13% ⁴

Table 1 - Data from QED Reports and Louisiana Technology Surveys

GOAL	EVALUATION	Public Schools 1997	Public Schools 1998	Public Schools 1999	Public Schools 2000	Public Schools 2001	Non-Public Schools 1997	Non-Public Schools 1998	Non-Public Schools 1999	Non-Public Schools 2000	Non- Public Schools 2001
	network).										

Table 1 - Data from QED Reports and Louisiana Technology Surveys

GOAL	EVALUATION	Public Schools 1997	Public Schools 1998	Public Schools 1999	Public Schools 2000	Public Schools 2001	Non-Public Schools 1997	Non-Public Schools 1998	Non-Public Schools 1999	Non-Public Schools 2000	Non-Public Schools 2001
Effective and engaging software and on-line resources will be an integral part of every school curriculum	Percentage of <u>schools</u> with <u>students</u> who participate in distance learning		38%	17%	10%	11%		25%	13%	9%	8%
	Percentage of <u>teachers</u> who participate in distance learning	*	*	23%	14%	19%	*	*	22%	14%	12%
Every system or independent school will engage in long range planning for technology in the schools	Percentage of schools that have a technology plan	73%	90%	94%	86%	90%	58%	88%	92%	93%	97%
	Percentage of schools that have reviewed their plans for technology within the last year	87%	99%	78%	68%	74%	94%	97%	75%	83%	81%

* Data were not collected.

¹ Ratios for 1997 included 486 type computer, whereas later years did not.

² Data for 2000 and 2001 represent school-based only; school and district persons counted in previous years.

³ Results were presented in a different format

⁴ Data for first three years represented both school and administration buildings. Data for 2000 and 2001 represent schools only.

Technology Training Evaluation

In this fifth year of the Louisiana Technology Initiative, professional development was the major emphasis, not only for teachers, but for all personnel involved in education in the state. Toward this end, LCET and its extension labs in the nine regional centers developed training sessions in the areas of technology literacy, integration of technology into the curriculum, application of software and skills training, technical support training, administrative training issues, and assistive technology training. Districts and consortia were encouraged and aided to do likewise. Public and non-public school teachers, school and district administrators, personnel from the Louisiana Department of Education, and university people were all afforded opportunities for technology training and strongly urged to participate.

The sessions provided multiple strategies for improving classroom instruction, administration of technology programs, and student achievement. Though continuing to emphasize the Louisiana INTECH model, programs such as ThinkQuest, Making Connections, Marco Polo, and K-12 On-line Databases were continued and improved and new ones developed, especially the LEADTech program for administrators.

The ***Evaluation of Training Form***, also known as the "***Technology Training Evaluation Form***", was designed to provide data on all professional development sessions pertaining to technology in the state. It is on-line at <http://www.lcet.doe.state.la.us/submissions/>

Results

As shown in **Table 2** below, **1,318** professional development sessions were presented in Louisiana during the 2000-2001 school year, involving **15,344** participants including **12,215** teachers. All three categories show impressive increases over last year.

Multiple responses from a trainee were possible because some educators participated in several sessions and completed the forms after every session. Sessions were first registered by the presenter and assigned passwords. Participants used the password to access the on-line evaluation form and anonymously complete it at the end of the session. Data from all sessions that occurred in the state between August 15, 2000 and August 11, 2001 were compiled for this report. This provides a global view of the quality and impact of the professional development activities taking place in the state during the 2000-2001 school year. It is important to note that these data do not show unique counts of participants in each category, but instead show how many participated in the sessions. It was possible, and indeed probable, that some individuals participated in many sessions.

Table 2 - Professional Development for Louisiana Educators, below shows the results for total participants in the state, as well as detailed information on types and numbers of participants for areas of major focus this year, such as LEADTech and K-12 On-line Resources.

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Table 2**Professional Development for Louisiana Educators**

Data from Evaluation of Training Form

Total Training Sessions in the State	1,318
Total Educators Participating in Training Sessions	15,344

Number of Participants Completing Evaluations									
	Teachers	School Admin.	Paraprofessionals	Parents	University	Central Office Admin.	Support Staff	Dept. of Educ.	Total
All Sessions in 2000-2001	12,215	1,486	411	100	30	238	821	33	15,344
LA INTECH	2,478	56	26	1	4	16	36	7	2,624
Application Software/Skills Training	609	46	38	16	1	16	130	1	857
LEADTech	0	353	0	0	0	20	0	1	374
K-12 On-line Resources	281	16	9	0	0	3	4	0	313
Marco Polo	175	8	12	0	0	3	5	0	203
Making Connections	83	3	0	0	0	2	1	0	89

Levels of Technology Expertise				
	Beginner	Intermediate	Advanced	Instructor
All Sessions in 2000-2001	32%	54%	11%	4%
LA INTECH	25%	59%	13%	3%
LEADTech	29%	61%	9%	1%
Application Software/Skills Training	48%	45%	6%	0.8%
K-12 On-line Resources	32%	54%	10%	4%
Marco Polo	23%	54%	18%	5%
Making Connections	31%	44%	13%	11%

Ratings for All Professional Development Sessions			
A = Excellent B = Good C = Satisfactory D = Unsatisfactory F = Did not meet expectations			
	Percentages		
	A	B	C
1. Information was presented in an organized manner.	78%	14%	6%
2. Handouts were useful.	79%	12%	8%
3. Training materials were appropriate to participants' level of experience.	73%	16%	10%
4. Trainer presented information in well-organized manner.	81%	11%	8%
5. Overall effectiveness of training session.	76%	14%	10%

Participants were asked to gauge their Level of Technology Expertise - Beginner, Intermediate, Advanced or Instructor. As evident in the chart below, percentage of Beginners decreased from 37% to **32%** while Intermediates increased from 49% to **54%**. Advanced and Instructor levels saw little change. Clearly, state educators are advancing to higher levels of technology expertise as a result of training sessions offered in the state.

Comparison of Levels of Technology Expertise		
Data from Evaluation of Training Form		
	1999-2000	2000-2001
Beginner	37%	32%
Intermediate	49%	54%
Advanced	10.5%	10.7%
Instructor	3.8%	3.52%

For five questions in the "Program Presentation" and "Program Effectiveness" sections of the form, respondents were asked to assign one of these grades: A= Excellent, B = Good, C = Satisfactory, D = Unsatisfactory, F = Did not meet expectations. Percentage scores for all participants for all five questions were above **73%** indicating that sessions were considered very satisfactory. In the "Overall grade for training session" **76.13%** awarded a grade of **A**, up from 76.03% last year, and a small increase was evidenced in **B** grades. Scores of **C** and **D** showed small decreases. Obviously, the technology training sessions in the state are accomplishing their goals.

Immediate feedback for each session is provided on the Technology Coordinator's Web Page by accessing the appropriate links for Districts, Dioceses, State Schools, or TLT Centers from the Submissions home page at <http://www.lcet.doe.state.la.us/submissions>. On this page, Technology Coordinators can find statistical results for each session, as well as Overall Statistics of the District Training Evaluations and the Overall Grade for Training Sessions in the Districts. See *Appendix H - Form Completed by Instructor and Training Evaluation Form*

End of Year Reports

Louisiana has 64 public parish school systems, two city school systems, and seven state schools, including schools for the deaf, visually impaired, and for children with physical disabilities among others. In recent years, the legislature has approved the creation of state-funded charter schools, which were also eligible for funding this year. Of the **70** public systems that received funding this year, all of the 66 districts and four of the state schools completed an *End of Year Report* (EOY) which were due by August 31, 2001. The non-public schools include seven Catholic dioceses, and 26 private, independent, and alternative schools. Due to delays in receiving CBTF funds, one diocese, all of the charter schools, and 21 private schools opted out of the grant program. Of those that received funding, six dioceses and five of the non-public schools completed the *End of Year Report*.

A separate category was for recipients of Professional Development Grants. *End of Year Reports* were completed by technology coordinators from the 12 districts serving as fiscal agent for consortia receiving District/Consortia Professional Development Grants and the seven districts awarded High School Technology Leadership grants, which targeted secondary school redesign. Technology facilitators at the nine regional TLTC centers reported on the Teaching, Learning, and Technology Centers (TLTC) Continuation Awards. These grants were used for professional development in technology.

All *End of Year Reports* were submitted on-line. Copies of these forms are found in *Appendix I* and *Appendix J*. The forms requested demographic information about the district, school or consortia, the amount of the Classroom-Based Technology Fund and Technology Literacy Challenge Fund awards, the latter only for districts, state schools, and professional development consortia. The next section listed the six objectives of the State Technology Plan and requested that technology coordinators submit local goals under the appropriate state goal each fulfilled. For each goal, the measure, method of data collection, source of data, baseline status date, and baseline results, current results as of August 31, 2001, and anticipated results as of September 2002, were submitted.

The next section of the EOY solicited explanations of how the local educational technology goals aligned with the state's technology plan and with their own parish learning goals, the primary uses of the award, grade levels and content areas impacted. Section V. required an explanation of how the use of the awards and partnerships with businesses, libraries, and private entities helped them to reach their goals.

The EOY also solicited responses referencing the National Technology Goals/Pillars with four Likert-type rubrics (scale = 1 to 5). Each rubric indicated progress toward the goals as a result of all funding sources (federal, state and local). See *Appendix N for Table 6-Four National Pillars- Mean Scores*. The final section requested a description of the process for ongoing evaluation of technology integration and its effect on student achievement, progress toward meeting National and State Goals, and additional comments. Consortia were not required to complete this section.

Demographics

Public school districts were awarded both CBTF and TLCF funds while dioceses and non-public school received only the state-funded CBTF moneys. Professional Development Grants were funded only with TLCF moneys. The total awarded from both funds was **\$12,088,297.07**. Details are in **Table 3** below.

Table 3 - Total Technology Initiative Funds Awarded for 2000-2001				
	CBTF	TLCF	TOTAL CBTF/TLCF	TOTAL All Grants
Technology Implementation Grants				
Districts	\$ 2,101,097.00	\$ 3,779,669.95	\$ 5,880,766.95	
State Schools	\$ 13,081.00	\$ 28,466.56	\$ 41,547.56	
Charter Schools	\$ 23,001.00	\$ 55,148.80	\$ 78,149.80	
Total Public Schools	\$ 2,137,179.00	\$ 3,863,285.31	\$ 6,000,464.31	
Dioceses	\$ 264,344.00		\$ 264,344.00	
Non-Public Schools	\$ 28,553.00		\$ 28,553.00	
Total Non-Public Schools	\$ 292,897.00		\$ 292,897.00	
TOTAL Technology Implementation Grants	\$ 2,430,076.00	\$ 3,863,285.31	\$ 6,293,361.31	\$ 6,293,361.31
Professional Development/Leadership Grants				
Technology Continuation		\$ 2,025,000.00	\$ 2,025,000.00	
District/Consortium Professional Development Grants		\$ 3,079,935.76	\$ 3,079,935.76	
High School Technology Leadership Awards		\$ 690,000.00	\$ 690,000.00	
TOTAL Professional/Leadership Development Grants		\$5,794,935.76	\$5,794,935.76	\$5,794,935.76
TOTAL FUNDS AWARDED	\$2,430,076.00	\$9,658,221.07	\$12,088,297.07	\$12,088,297.07

End Of Year Report - Results for Public and Non-Public Schools

Alignment with Louisiana Technology Plan

The format of the following section provides the objective and district, diocese, or school responses in a qualitative context analysis, which identifies major themes in the information and data, provided by the technology coordinators. Results reported are from the 81 grantees that were funded and completed the on-line reports.

The State Technology Goal.

All educators and learners will have access to technologies that are effective in improving student achievement.

Objective 1: Technology-rich Learning Environments¹

District technology goals focused strongly on providing access to technologies that are effective in improving student achievement and decreasing student to computer ratios. To meet these goals, schools and districts placed multimedia computers in classrooms, connected them to the Internet, and provided peripherals and appropriate software. Nine attained or exceeded the national goal of one multimedia computer for every 5 students. More sophisticated technology, such as NetTV, entire presentation systems, digital cameras, graphing calculators, T1 lines, and wireless connections were noted this year. Many installed wide area networks (WANs), local area networks (LANs), and Intranets. The improved infrastructures were to enhance student learning and increase scores on statewide tests.

Several districts targeted specific grades, especially 5-8, and subjects, notably math, science, language arts and social studies. Others aimed to increase student achievement by meeting LA Content Standards and Foundation Skills, and providing access to databases. Some goals provided for professional development, especially through INTECH training, in the belief that technology will drive change in teaching and learning. Of the 74 districts, 33 indicated that they had used TLCF fund to accomplish this objective.

Objective 2: Professional Development

The understanding of technology and its integration into the curriculum is an underlying belief of the state technology plan. Districts and non-public schools met this directive by providing staff development in the integration of technology into curricular activities, mostly through INTECH classes and staff development sessions targeting technology skills and effective teaching. Sessions on basic computer skills, educational software, the Internet, and addressing technical problems were offered, and some focused on the INSITE (Indepth Systemwide Integrated Technological Excellence) and INCLASS programs.

Training was conducted in districts and also at regional training centers and the TLT Centers. Some university courses were offered for credit, and some sessions were designed for technical support personnel and administrators. One district provided stipends to teachers attending training sessions, and another paid substitutes and travel with the funds.

¹ School districts were not required to respond to all strategies and objectives in the State Technology Plan, but only to those matching their goals.

Technology coordinators reported that a major percentage of teachers and other personnel participated in professional development activities. The intent was to improve teacher competence in the use and integration of technology to increase student achievement. Accordingly, some goals aimed for teachers to implement new strategies, demonstrate proficiencies, meet educational technology foundation standards, and develop technology-connected lessons. Districts planned for students to increase achievement in mathematics, language arts, geography, social studies, and other content areas, as well as meet minimal competencies for each grade level and increase critical thinking and reasoning skills. Some districts provided training for teachers in schools labeled as "low performing" in the state accountability measures.

Funds were used to place technology in classrooms, purchase computer-based training materials, and establish regional training facilities, and to hire an on-site educational technology instructor. Of the 70 districts, 46 expended TLCF funds, indicating that 66% used TLCF funds to accomplish this objective,

Objective 3: Integration of Technology and Learning

The goals of schools striving to merge technology into their current local curricula centered on the improvement of teacher competence and student achievement. Districts hoped that teachers would routinely integrate technology into instructional activities, utilize software and peripherals, and use on-line resources. They aspired to improve standardized test scores in mathematics, language arts, social studies, and other content areas, on the GEE, LEAP, and ITBS tests. Some focused on decreasing the number of students scoring in the "Unsatisfactory" and "Approaching Basic" categories of the LEAP test results. Impressively, most attained these goals. Other efforts included increasing the use of computers and the Internet and developing critical thinkers.

For attaining these goals, districts are requiring technology components in lesson plans and requiring that content standards serve as benchmarks of curriculum development. Distance learning for students and teachers, as well as other web-based resources were provided for enhancing curriculum, and teachers were required to integrate their INSITE and INCLASS training into their instruction. Some sent administrators to participate in LEADTech, a program designed to acquaint leaders with technology integration and improve their technology skills. Also, they purchased software for INTECH activities and posted the lesson and unit plans of INTECH-trained teachers on district web pages and Intranets.

Great strides were made this year in advancing technology integration to the student level, as many districts required that student activities incorporate technology and Internet resources and that students produce multimedia portfolios, take on-line courses, use graphing calculators, write with word processors, and learn keyboarding. Others focused on increasing the percentage of students meeting the Performance Indicators in the Louisiana K-12 Educational Technology Guidelines.

This state objective had the largest number of district goals, with a total of 198. Thirty-nine (39) of the 70 districts, approximately 56 percent, used TLCF funds to accomplish this objective.

Objective 4: Technology Leadership, Policy and Accountability

Louisiana has been very fortunate to have existing employees who could assume the responsibilities of technology coordinator for districts and schools. Districts are now taking the next step by cultivating leadership within schools and districts for the integration of technology into the curriculum. Some are training technology coordinators,

librarians and teacher trainers, and using grant moneys to fund these positions, as well as assisting schools in their pursuit of grants for technology projects. Administrators were sent to LEADTech training sessions and these leaders will be expected to monitor the effectiveness of technology use. INTECH trained teachers trained local school teams in the integration of technology and curriculum. One district plans to have leaders choose technology policies that promote student achievement. Participation in district Teaching, Learning, and Technology Councils (TLTC) was required in others.

Use of technology was added to some teacher observation and/or evaluation forms, others required teachers to prepare portfolios showing technology integration into their teaching. Districts are posting workshop information and memoranda on eboards and web pages, and evaluation results of technology training sessions on their websites.

Acceptable Use and Copyright, and Children's Internet Protection Act Policies were developed, adopted and distributed to personnel and students. Internet filters for unacceptable sites were installed in some districts. Furthermore, these legal and ethical issues have been added to technology plans. Sixteen districts expended TLCF funds to accomplish the 107 goals posted under this objective.

Objective 5: Effective Use of Technology Funding and Resources

As schools and districts strive to better integrate technology into classrooms, many have recognized the need and importance of seeking funding from many sources. The agencies mentioned most were LEARN and state 8(g) grants for innovative programs, though private foundations, local businesses, and the Louisiana Public Broadcasting (LPB) system also contributed. The Professional Development Grants offered to various combinations of districts and non-public schools were prized for the extra moneys they provided for professional development and equipment, and in some cases technology coordinators were hired with shared funds. Other federal funds in the parishes, such as Title I, II, and Special Education provided technology. Ninety-three percent (93%) of the districts in the state applied for E-rate refunds, providing \$48,443,677 for networking and Internet access.

The increased usage of the TLTC and Regional Educational Service Centers (RESA) as well as nearby universities for professional development activities is encouraging. Many indicated that district coordinators for all programs, not just technology related, were receiving INTECH training.

Partnerships with telecommunication companies, such as Bell South, CenturyTel, Orion, and Compstar provided expertise in planning for technology, training, and equipment maintenance. These proved especially valuable in poor rural parishes, with few businesses or industry available for help. Only 10 districts used TLCF funds in this category to accomplish the 67 goals.

Objective 6: Public Awareness

Most respondents recognized the need to communicate the progress of their technology initiatives to stakeholders. As a result, public awareness of the implementation of technology in classroom was promoted through press coverage, school and district Web sites, conferences, parent centers, and presentations to school boards.

TLTC council proceedings were shared on the Internet and attempts were made to involve all stakeholders in the revision of district and school technology plans in order to share information with partners and supporters. Some offered workshops for community members as well as teachers.

Several districts expected student use of hardware and software as well as improved student achievement to generate favorable public awareness. There were 45 goals submitted under this objective and eight districts used TLCF funds to accomplish them.

State Technology Plan and Subgrantee Learning Goals

As reported elsewhere in this report, 100 percent of the state's districts have developed technology plans, and a large percentage were reviewed and revised during the 2000-2001 school year. Approximately 46 of them aligned goals in these plans directly to the State Technology Plan while 13 aligned to both the four national pillars and the state goal, amounting to an impressive 84% who are striving to meet state and national standards.

As student achievement is the ultimate measure of success, goals for improving student achievement, increased accountability, and meeting state standards were included in district plans as a means of accomplishing state goals. Fourteen districts stated that improving student achievement was their main goal.

They focused on creating learning environments rich in technology, many striving to attain the 5:1 student to computer ratio in the National goal, and increased Internet connectivity. Access to training for improved teaching and learning, especially through the INTECH model, was mentioned often.

LEA Educational Technology Goals Support LEA Learning Goals

For accomplishing district learning goals, most districts planned to improve academic achievement of all students through the effective use of technology, with over 50% of districts choosing this plan. Twenty-eight said they focused on integrating technology into the teaching and learning process, and a few thought this would be a catalyst for change in teaching. Adequate staff development to enhance teacher effectiveness and ensure technology integration, especially with INTECH sessions was the next most mentioned tactic. Some aspired to assure that teachers had materials and resources that support technology use in teaching, learning and instructional management, while others focused on training and support for all personnel and on meeting state accountability requirements.

Some grants targeted content areas, especially mathematics, reading and language arts, and emphasized curriculum based on state content standards. Others based training on Performance Indicators in the Louisiana K-12 Educational Technology Guidelines. Districts in some cases transcend curriculum goals and endeavor that students become motivated learners, critical thinkers, and engaged active learners.

Partnerships

The partnership with the state for receiving CBTF/TLTC funds was the most mentioned and most beneficial. Rural parishes depend heavily on these grants, due to the scarcity of local funding. There was an encouraging increase in the number of districts partnering with universities, TLTC centers and Regional Educational Service Centers. In one district, university students are creating an on-line discussion forum using Blackboard software for technology in education, on-line curriculum, and web pages of professional resources.

Districts indicated an effort to work with businesses, libraries, museums and private grant agencies that expressed interest in helping schools incorporate technology into curricula. Agencies noted in particular were the National Park Service, Exxon, the Louisiana

Universities Marine Consortium for Research and Education (LUMCOM), and Computers for Louisiana's Kids (CLK), an agency that teaches students how to repair donated computers then gives them to schools.

Grants from CenturyTel, Bell South, and Cricket, a local ISP provider, and others, provided free dial-up, email, access to databases, ISP services and WANs. Representatives from these providers often served on TLTC committees.

Collaborations with state and federal grants such as Title I, Special Education, and 8(g), is proving successful and university partners and the Louisiana Public Broadcasting system provide courses for educators. At least two districts profited from the expertise of Georgia Tech consultants and their technology integration modules.

Dioceses and private schools were grateful that they were included in professional development activities in the civil parishes where they reside, as well as at their regional TLT Centers. They were quite successful in securing grants and assistance from local businesses, foundations, and individuals.

Use of Funds

An overwhelming 90% of the grantees spent their funds on professional development activities, with sessions ranging from basic computer skills to courses for administering and evaluating technology integration. The Louisiana INTECH model is having a strong influence on teaching and learning in the state. About half of the funds (46%) were used for hardware, such as computer stations and peripherals and 44% provided curriculum software.

Mathematics was the most highly impacted curriculum area with 74% of the funds directed there. English (71%) and Reading (63%) received a great deal of attention also. Science (47%) and history (39%) were next, with Civics, Economics, Foreign Language, The Arts, and Other Areas targeted by 24% to 10% of the grantees. All grade levels were affected by the influx of grant moneys, with most programs designed for Pre-K through 12th grade and grades 4 through 8 also heavily targeted.

Four National Pillars

Each of the technology coordinators was asked to indicate the progress made toward fulfilling the Four National Pillars (Goals) for technology by marking a five-point scale. Ranges were described, and were different for each goal, with a ranking of 5 indicating high levels of attainment and 1 indicating low levels. **Table 4** below shows range descriptions for each ranking and mean scores for each pillar. Scores are for districts and state schools only.

For Pillar One, the mean on the five-point scale was **3.34**, indicating that more slightly than half of the teachers were participating in on-going training and receiving support to help students learn through computers and through the information superhighway. The mean score shows a slight increase from last year's mean of 3.28.

The mean value for Pillar Two, "All teachers and students will have modern multi-media computers in their classrooms," was **3.70**, as seen by the technology coordinators, up from 3.66 in last year's report. Indications are that the student to computer ratio is well below 13:1.

For Pillar Three, "Every classroom will be connected to the information superhighway," responses indicated that the mean value was **4.16** and well over 55% of the classrooms

were connected to the information superhighway. The mean score has increased from last year's mean of 4.06.

In response to Pillar Four, "Effective and engaging software and on-line learning resources will be an integral part of every school's curriculum", the mean response was **3.53**. This indicates that over half of the *schools* in the state have effective software and on-line resources. The mean score has increased from last year's mean of 3.49.

Table 6			
Means of Districts/Schools Fulfilling the Four National Pillars			
Pillar/Goal	1999	2000	2001
<p>1. All <i>teachers</i> in the nation will have the training and support they need to help all students learn through computers and through the information superhighway.</p> <p>1 = No members of teaching workforce participating in ongoing training & receiving support.</p> <p>3 = Half of the teaching workforce participating in ongoing training & receiving support</p> <p>5 = Entire teaching workforce participating in ongoing training & receiving support</p>	3.21	3.28	3.34
<p>2. All teachers and students will have modern multimedia computers in their classrooms.</p> <p>1 = All classrooms with a student to multi-media computer ratio greater than 21:1</p> <p>3 = All classrooms with a student to multi-media computer ratio of 13:1</p> <p>5= All classrooms with a student to multi-media computer ratio at or less than 5:1</p>	2.85	3.66	3.70
<p>3. Every <i>classroom</i> will be connected to the information superhighway.</p> <p>1 = Less than 14% of classrooms connected to the information superhighway.</p> <p>3 = 55% of classrooms connected to the information superhighway.</p> <p>5 = All of classrooms connected to the information superhighway.</p>	3.69	4.06	4.16
<p>4. Effective and engaging software and on-line learning resources will be an integral part of the school's curriculum.</p> <p>1 = Effective and engaging software and on-line learning resources not in use in any core content areas.</p> <p>3= Effective and engaging software and on-line learning resources in use in half of the core content areas.</p> <p>5 = Effective and engaging software and on-line learning resources in use in all core content areas.</p>	3.11	3.49	3.53

Evaluation

As districts strive to provide more professional development, they are also trying to ascertain whether teachers are integrating technology into daily classroom activities. Observation and monitoring of teachers was the most mentioned evaluation practice, with over 46% of districts reporting they did so. Technology integration is part of the district evaluation process for about one-third of the districts and dioceses. Administrators were trained to use technology integration evaluation instruments and some districts devised new rubrics and checklists to assess progress.

District plans are also showing an increased focus on student achievement this year as the ultimate measure of the success of integrating technology into teaching and learning. About 26% (64%) indicated they were using student test scores from the ITBS, LEAP, and GEE tests to measure improvement. and national goals and state standards have been factored into evaluations. Some compared student test data of teachers with extensive technology training to those with less.

Evaluation of individual training sessions, teacher and student self-assessments, pre-and post-surveys, interest and attitude surveys, lesson plans, observation checklists, portfolios, and final evaluations are all being used to develop summative data. Interestingly, there is an increased focus on evaluation of student knowledge and products with such devices as rubrics, portfolios, and Internet use logs.

Yearly reviews of technology plans were instigated by many districts and dioceses to determine the effectiveness of technology integration and student achievement. Districts and dioceses are encouraging teachers and administrators to take advantage of sessions at regional TLT Centers and university courses to acquire knowledge and skill in evaluation and assessment of technology integration. Several mentioned that they are using the LCET surveys, end of year reports, and evaluation of training forms, and the results of these measures that are posted on the LCET web page, for assessment and planning.

Evidence is mounting that educators are aspiring to meet state and national goals as many mentioned that they were measuring progress toward National Education and Technology goals, National Technology goals, ISTE standards, the State Accountability program, federal and state requirements, and district policies.

Comments

Technology coordinators were emphatic in declaring the CBTF/TLCF grants to be the most important contributor for implementing district technology plans and preparing educators for current technology and educational trends. Many rural districts expressed a need for more funds to help them "catch up" with more prosperous districts. Dioceses felt that their goals can only be reached in collaboration with local, state, and national agencies and would welcome more state funding.

Professional development offered at regional TLTC centers and through consortia filled a dire need for districts with few resources. One felt that the impressive successes attained with these funds inspired their district to invest in technology. Rural districts are especially appreciative of these grants. Perhaps this is best recognized in this quote from one rural parish: "Funds allowed students from rural, high poverty, low socio-economic district to defy the odds and surpass expectations."

End of Year Report - Results for Professional Development Grants

As the title implies, most goals for these grants, pertained to Objectives 2 and 3 Professional Development and Integration of Technology and Learning, respectively. Some were designed to focus on developing technology leadership and efficient use of resources by combining the efforts and resources of several parishes and non-public schools and dioceses. To this end, they capitalized on personnel, facilities, and funds from all entities.

Objective 1: Technology-rich Learning Environments ²

District/Consortia grantees submitted most of the goals in this category. Placing multimedia computers connected to the Internet in classrooms and providing access to technologies that are effective in improving student achievement were the most often mentioned goals. Some districts used these funds to improve the student to computer ratio in their regions. Consortia installed computer stations in district or regional training centers and two installed satellite branches of the TLTC centers on university campuses.

Installed computers were used for INTECH and training on strategies for integrating software programs into curriculum and use of computer peripherals. Some of the High School Leadership grants were used to train students to be computer-service technicians and to certify in programs such as Microsoft Windows 2000 networks, Microsoft Office, web page publishing, and graphic production.

Objective 2: Professional Development

The goal of over half of the consortia (52%) was to provide LA INTECH training, mostly at TLT Centers. They also offered staff development that included technology and its integration into the curriculum, software and hardware use, basic computer skills, technical support training, and training administrators how to evaluate technology immersion. Awareness of the new state accountability program was evidenced by the goals in two projects directed at training teachers in low performing schools.

Several respondents included specific goals for teachers to develop technology-connected lesson and unit plans and implement new strategies for integrating technology which improve student achievement, as required in the INTECH program.

District Consortia began working more closely with universities, evidenced by offering technology integration courses for credit, moving district labs to universities, and developing video-conference courses to train teachers living far from university campuses. One Consortia included university professors in the training in an effort to prepare pre-service educators for integrating technology before they began teaching.

The High School Leadership Consortia made great strides in working closely with community and area businesses to acquaint educators as well as students with job expectations beyond graduation. They also began establishing uniform high school curricula that includes Louisiana Content Standards.

Most consortia reported that goals had been achieved, as evidenced by large numbers of sessions and participants, as well as installment of two satellite training laboratories on university campuses, through consortia grant funds. Several TLT Centers used pre and

² Not all strategies and objectives in the State Technology Plan required responses from schools districts.

post measures of the Louisiana INTECH Course Assessment Form and some used the ***Evaluation of Training*** form. Effect at the classroom level was accomplished by redelivery and “train the trainer” sessions, collection of participants’ lesson plans and, in many instances posting them on web sites.

Objective 3: Integration of Technology and Learning

Grantees receiving Professional Development grants focused strongly on improving student achievement through the integration of technology. Development and utilization of technology-connected lesson and unit plans focused on the integration of technology and learning figured strongly, with some posting them on district web pages and Intranets. Teachers’ growth in the use and understanding of how to integrate technology with content standards was deemed important. Over one-fifth of grantees wanted teachers to integrate the Internet into lessons and research projects, and to utilize the new technology in their classrooms.

Student LEAP test and standardized test scores served as measures for student improvement in some, but several were looking for student activities that incorporated technology and Internet resources, student multimedia portfolios, and increased student use and complexity of technology activities.

As a result of the funded activities, staff development activities were available to educators in all districts and regions of the state, to both public and non-public educators. Impressive gains in student achievement measures were also cited.

Objective 4: Technology Leadership, Policy and Accountability

The goals of many consortia included the cultivation of leadership for the integration of technology into curricula within schools and districts by training teacher trainers and instituting the redelivery phase of the LA INTECH plan. Some involved administrators in LEADTECH courses and designed courses for administrators to learn how to evaluate technology integration in classrooms.

One district hired a mentor-trainer with grant funds and found that this helped the faculty to make progress in effective technology integration.

The districts receiving High School Leadership Grants and District Consortium Grants this year reported few goals for this objective, but the nine receiving continuation funds appear to be expanding beyond the basic literacy and technology integration training issues to the administrative level issues in this area.

Most consortia relied on increased numbers or percentages of educators trained as a measure of their goals. Anticipated results typically focused on increased numbers of educators and administrators trained.

Objective 5: Effective Use of Technology Funding and Resources

Though very few grantees wrote goals for this objective, a pattern of pooling resources for increasing professional development opportunities was still evident. Mention was made of including business, military, and university people on technology committees and of partnerships between TLTC centers and universities. Staff members at TLTC worked with an InClass regional coordinators to develop classes for participants.

High School Leadership Grant recipients reported that some stakeholders worked in schools, donated funds for substitutes, helped them seek grants for professional development of high school teachers, and supported staff development efforts. One

reported that they shared their professional development materials to other high school teachers. Another partnered with LaCUE and America 2000 Challenge to host a Technology Fair which teachers from 17 parishes attended.

One District consortium is involving higher education representatives in their meetings. An interesting development this year was the development of assessment tools for technology projects and the training of school teams as well as staff members for their use.

The sharing of resources and talent has proved to be extremely beneficial in the incorporation of technology into education. Consortia anticipated forming more partnerships and collaborations in the future.

Objective 6: Public Awareness

For technology initiatives to continue and progress, it is essential to communicate their success to important stakeholders. Most consortia representatives felt that promoting public awareness of the implementation of technology in teacher preparation and classroom instruction was helping them to gain new allies as well as the support of businesses in the community. Information was disseminated through press releases, school and district web sites, and conference presentations. Web pages were used to advertise classes, resulting in an increase of participants from surrounding parishes. Business partners were involved in job shadowing and internship programs for one High School Leadership Grant. Another produced a video about their high school project that was featured in the newspaper, a magazine and on television, as well as shown extensively at training sites around the state.

Some involved stakeholders in the revision of their technology plans and another offered basic technology skill training for adult learners, striving to develop programs that would meet community needs and increase local support. Though few of the grantees had goals for this objective, results were nevertheless positive and impressive.

State Technology Plan and Subgrantee Learning Goals

The importance of aligning consortia's educational technology goals to the State Technology Plan and/or national goals is evident, in as much as 80% of those reporting said they did so. Almost three-fourths (72%) targeted staff development, with the INTECH model used for the incorporation of state standards and benchmarks. The direct influence of professional development on student achievement was recognized with goals of improving ITBS and LEAP scores, increasing accountability at all levels, and providing opportunities for educators to use technologies that help students meet standards.

Most District Consortia technology goals were designed to support learning goals of the districts represented in the groups, especially that of providing professional development in the effective use of technology. Providing technical infrastructure and attaining the national goal of a 5:1 student to computer ratio were mentioned by many, with funds used for the installation of computer stations for teachers in the new projects and district or regional training centers. Their use of funds is included in **Table 3** above.

Educational Technology Goals Support LEAs' Learning Goals

In this fifth year of the Technology Initiative, strong evidence of its impact on local learning goals can be found in this section of the reports. Integration of technology was found to provide both a catalyst for change in teaching and a positive impact on student achievement. Approximately 45% of grantees reported that their goals focused on

integrating technology into the teaching and learning process, providing professional development with the INTECH model, and improving student achievement through standards-based instruction. TLT Centers receiving Continuation Grants are providing training linked to the ISTE Foundation Skills, the Louisiana K-12 Technology Guidelines and the INTECH model, and are supporting school improvement programs to impact student achievement. They feel that the Louisiana Accountability Plan requires increased student achievement and that technology is the means to that end.

District Consortia aim to provide training, support, and equipment to create technology-rich learning environments to improve teaching and learning. Students and teachers will become life-long learners, productive workers, and responsible citizens as a result of the integration of technology and learning. One has formed a strategic alliance with the university for training teachers and pre-service teachers, and for other resources.

The High School Leadership Grantees view technology integration as the means of providing students with process-based, hands-on learning to develop higher order thinking skills. The impact of technology on education in Louisiana at the classroom level has indeed become profound.

Partnerships

Collaboration with other districts and non-public schools was a requirement for awarding the Professional Development Grants, so a majority considered the use of the TLCF funds for the continuation of the TLT Centers and establishment of satellite branches to be their most significant accomplishment. Almost 40% considered the TLCF grants to be an important partnership with the state that enabled them to offer standards-based, technology-rich professional development to teachers as well as to purchase computers and software. Some stated that training sessions would be limited without the grants, due to sparse local funding. Business partners provided computers and support. One grantee cited a partnership with the Computers for Louisiana's Kids (CLK) program that provided 200 multimedia computers for their program.

Consortium/School/Business Partnership committees formed at the TLT training centers were providing support, guidance, and technical expertise. Two grantees reported having steering committees or advisory councils made up of LEA, industry, and school board representatives who advised on goals, objectives, support, funding and evaluation.

Since High School Leadership Grants focused on training students for jobs in the community, several grantees forged strong two-way liaisons, with business providing technology training for teachers, job-shadowing, and internships, as well as input on their needs. Schools in turn offered vocational courses with links to area businesses. Businesses and private entities endorsed the use of IP-based Video Conferencing for the delivery of university courses over a multi-parish area, serving many teachers in rural areas who had been unable to attend the universities.

A regional Technology Fair that impacted 17 parishes was staged with the combined funds and expertise of several parishes, grants, universities, and businesses. Districts are obviously realizing the value of combining resources to attain the goals of their grants.

Use of Funds

In keeping with the intent of the grants, most Professional Development Grant recipients used the TLCF awards for professional development, a full 86% of them. Fifty percent (50%) installed hardware while 39% purchased curriculum software. Less than 10% spent their funds on connectivity or on-line resources.

An encouraging spread across all curriculum areas was achieved with the awards, with a range of 36% to 79% for all subject areas impacted. The curriculum area of mathematics was targeted by 79% of the grants, while both English and Reading both received 75% of the professional development funds. About 57% used their awards for science and both geography and history were chosen as targets by about 57% of the grantees.

Evaluation

The State Accountability Plan and the expectations held for student achievement in all schools in the state is well known by districts. Over half (68%) of the grantees chose to gauge their success with student scores from the IOWA Test of Basic Skills and the LEAP and GEE scores. Approximately 60% planned to observe, monitor and evaluate teachers on their use of technology in the classroom. Measures such as teacher and student surveys, checklists, and portfolios were also used. Some districts are training administrators on technology integration evaluation.

Much more emphasis was placed this year on evidence that teachers are actually using technology-related lessons and activities. They were looking for lesson plans that address state and performance standards, INTECH portfolios, Internet use logs, electronic portfolios, and relied upon school site visits and regional coordinators for collecting data. Several districts and TLT Centers are offering training in assessment of technology use for teachers and administrators and are using statistical analysis of data collected.

School and district technology plans and policies were reviewed to assure that they are facilitating student achievement and effective use of technology. Some are measuring progress through the state content and performance standards, and National Educational and Technology Goals.

On-going and/or yearly evaluations, such as the LCET *Evaluation of Training Form* and *School and District Technology Surveys*, were used to determine the effectiveness of technology integration and to find out which strategies work. One district is in the process of developing a new Teacher Evaluation Rubric for assessing skills and planning training.

Great progress was made this year in the selection of assessments and measures that accurately align with goals. Grantees are progressively targeting more state and national goals, requirements, and standards, and are training educators to accurately assess progress in both quantitative and qualitative measures.

Additional Comments

The Technology Literacy Challenge Funds were extremely beneficial in preparing educators for current technology and educational trends. Some felt they were the most important contributor to implementation of district technology plans. The funds allowed the training of many additional educators and several feel that continued federal support for staff development should be among the highest funding priorities.

End of Year Report for Louisiana Center for Educational Technology

The Louisiana Center for Educational Technology (LCET) serves as the state leadership group for the Department of Education in its educational technology efforts, to ensure that Louisiana's classrooms are creating a workforce prepared for the demands of the 21st century. Four major areas of the state plan drive Louisiana's technology initiative:

- the development of technology-rich learning environments and a K-16 network;
- professional development opportunities in the use of technologies that help students and teachers meet high standards;
- access to curricular materials and resources that support the use of technology in teaching and learning;
- accountability and evaluation procedures that monitor the effectiveness of technology use.

The Director of the Louisiana Center for Educational Technology and the staff were asked to identify goals, objectives and/or activities, and actual results that were accomplished by the staff for these as well as all strategies in the State Plan. The major accomplishments identified are reported. A complete description of the state technology initiatives can be found on the Department of Education's web site <http://www.doe.state.la.us>.

Objective 1: Technology-Rich Learning Environments

Chris O' Neal, who served as Director until July 2000, and Sheila Talamo, present director, and their staff have actively recruited and received funding for technology infrastructure from state and federal sources such as Legislative grants, TLCF grants, and E-rate rebates. Districts and schools were assisted with short- and long-term planning for technology and were given support during the grant application process. The Center hires technical staff to provide, to support, and to manage the development of the Louisiana technology network. Cooperative efforts between LCET and the Governor's office, LaSIP, LACUE, and the Blue Ribbon Commission have helped to provide a uniform technical infrastructure and models. Representatives of these other groups were appointed as members of the State Technology Advisory Committee.

The **Statewide Distance Learning Network (SDLN)** project received continued funding from the BESE board to provide students and teachers the opportunity to access needed courses and appropriate curriculum and enrichment programs utilizing telecommunications systems. Students are provided access to BESE-approved core curriculum courses required for high school graduation, university admission, Louisiana Tuition Assistance Plan, TOPS, Board of Regent's Scholar Award, and Advanced Placement (AP) courses. The current modes of distance education include telelearning, satellite, and web-based courses. In addition, the *Louisiana Virtual Classroom (LVC)* pilot project of web-based courses that began in the fall of 2000 offered 11 courses for high school students. Eleven teachers and one university professor delivered on-line courses including Latin, Spanish I, II, Algebra I, Environmental Issues, Computer Science, World History, English IV, and Physics and Fine Arts. Full details regarding the *Louisiana Virtual High School* can be found at <http://www.doe.state.la.us/DOE/lcet/DL.asp>

Thirty-seven (37) compressed Video sites have been established across the state and collectively comprise **LCETnet**, which is used for compressed video conferencing done in "real time". Several courses are being offered via **Telelearning**, and audio approach, and through **Satellite Learning**, which is video-based. The **SDLN** received \$458,500 from the U.S. Department of Education Advanced Placement Incentive Proposal (APIP) to provide students access to Advanced Placement (AP) Courses via the Internet. The grant paid tuition costs for approximately 200 low-income students to take AP on-line courses in each of the three years, as well as AP exam fees for almost 500 low-income students. Complete information and registration instructions for all distance learning courses can be found at <http://www.doe.state.la.us/DOE/lcet/DL.asp>

Objective 2: Professional Development

Louisiana INTECH is an intense, content-rich, hands-on, 56-hour staff development program. *Louisiana INTECH*, an adaptation of the Georgia INTECH model, provides teachers with many examples of effective technology-based strategies that support and enhance curriculum and can serve as a catalyst for fundamental change in overall teaching and learning processes. INTECH teams of teachers learn basic technology skills while focusing on project-based activities that are based upon the Louisiana Content Standards. The K-6 INTECH model was implemented in 1999 and the 7-12 INTECH model was developed and piloted during the 1999-2000 fiscal year. During the 2000-2001 school year, a total of 188 INTECH training sessions were held across the state, with 3,472 teachers, administrators, support staff, parents and others participating.

Nine cycles of INTECH were offered through the Louisiana Center for Educational Technology. Each cycle contained 24 educators for a total of 219 participants. The LCET team continues to develop and edit the lessons and is compiling INTECH Binders for distribution to participants.

The Technology Continuation Grants awarded from TLC Funds enabled the nine ***Teaching, Learning, and Technology Centers*** to continue professional development training at regional staff development centers around the state. They serve as extensions of LCET for providing technology training services to educators. TLTC Facilitators participate in ongoing training at LCET four days a month.

Through the INTECH 2 project, the LCET staff continues to develop models of technology integration for all content areas and grades. The third annual *Teaching, Learning, and Technology Institute (TL²)* held in July 2000 piloted the INTECH 2 Science model. Two groups totaling 48 teachers participated. Multiple sessions were offered throughout the year in LEADTech, ThinkQuest, Marco Polo, and other initiatives. Active partnerships with the state *Teaching, Learning, and Technology Council*, the *State Technology Advisory Committee (STAC)*, and *LASIP* provided opportunities for advice from business, regional, and university representatives on the design of teacher training activities.

Objective 3: Integration of Technology and Learning

The Louisiana INTECH model developed by LCET provides many examples of effective technology-based strategies that support and enhance curriculum. The Louisiana Content Standards that are the basis for all technology-connected lessons can be found on-line DOE web site. All professional development activities offered by DOE and LCET emphasize technology integration into the curriculum to support those standards.

The ***Making Connections Project***, a collaborative effort between LCET and the Louisiana Department of Education's Division of Student Standards and Assessment, continued this year to create a "virtual" resource center of lesson plans, web site resources, software and assessment items for state educators.

Through the creation of a "virtual" resource center on the Department's web site, teachers access "a one stop shop" for instructional materials that enhance teaching, learning, and technology opportunities in Louisiana's K-12 schools. The Louisiana Content Standards – Mathematics, English Language Arts, Science, Social Studies, Foreign Languages, and the Arts – are the heart of the project and provide the context in which all resources are selected, presented, and implemented. The initial components of this electronic resource center include model lesson plans, web site resources, software products, and statewide assessment items.

During the 2000-2001 school year, LCET began a partnership between Making Connections and Marco Polo to provide standards-based lessons and activities developed by nationally recognized organizations such as the National Council on Economic Education, National Geographic, National Council of teachers of Mathematics, and The Kennedy Center. Marco Polo lessons were linked to both the Louisiana Content Standards and Benchmarks, and the Louisiana K-12 Educational Technology Guidelines and Performance Indicators. For more information, visit <http://www.lcet.doe.state.la.us/conn/>.

The Louisiana Center for Educational Technology was selected to be the state partner for **ThinkQuest**, the world's fastest-growing Internet-based educational program. Scholarships, cash, and awards go to students and teachers, as well as help with developing quality educational materials for the Internet to be used by others. Workshops were hosted all over the state, and a **ThinkQuest Camp** was held at LCET during the summer of 2001 to assist teams with web page design for the national competition.

Objective 4. Technology Leadership, Policy and Accountability

Technology leadership opportunities for principals and superintendents were provided through the *Louisiana Educational Advancement and Development with Technology (LEADTech)* initiative. The project offered in-depth understanding of the role of instructional technology as it relates to total school improvement and increased student learning. LEADTech is a three-year grant funded by the Bill and Melinda Gates Foundation. The LCET worked closely with participants by providing leadership models and technology-based strategies that support and enhance school improvement, and function as a catalyst for fundamental change in overall teaching and learning processes. The program offers opportunities and guidance through a variety of methods including web-based course, face-to-face seminars, video-conferencing, application workshops, etc. Each participant received a laptop computer and received in-depth consultation and leadership from LCET.

During the 2000-2001 session, 306 school and central office administrators received training in 25 sessions. Approximately 800 public and non-public school principals and superintendents in the state will be trained over the three year span of the grant. Complete information can be found on the webpage at [<http://www.lcet.doe.state.la.us/leadtech/>](http://www.lcet.doe.state.la.us/leadtech/).

The Department of Education's Division of Student Standards and Assessment and the Louisiana Center for Educational Technology collaborated in the coordination of the **Committee for Advancing Technology Standards (CATS)**. The CATS steering committee directed three major initiatives related to the effective integration of technology in K-12 curriculum: (1) development of K-12 Louisiana Educational Technology Standards for students (2) expansion of the Secondary Computer Education curriculum through the identification and development of standards-based high school technology courses and course descriptions, and (3) development of Standards for Distance Education.

Ongoing collaboration and dynamic partnerships with a variety of educational entities and leaders further strengthen statewide technology strategies. Of particular note are partnerships with: the Louisiana Systemic Initiative Program (LaSIP), the Louisiana Challenge Program, the Delta Rural Systemic Initiatives, Louisiana Public Broadcasting, regional Teaching, Learning and Technology Centers, all of the state's public and non-public school systems, and other divisions within the Department of Education.

Through the Louisiana Technology Initiative, the Center administered the awarding of CBTF and TLCF funds. Collaboration with the State Educational Technology Planning Committee (SETPC) has advanced the funding for technology projects, and the Universal Access Committee helped oversee the E-rate application process.

The LCET has worked with schools and districts in developing their technology professional development plans. The Center provided numerous workshops to Department staff to address the need for enhanced technology leadership. It continues to research and present new possibilities for answering the needs of students with disabilities. LCET has offered recommendations to the State Technology Advisory Committee and the BESE board on initiatives and policies that promote technology as integral to the teaching and learning process.

Objective 5: Effective Use of Technology Funding and Resources

To provide quality educational resources for educators, Louisiana became a state partner with *ThinkQuest*, a national organization aimed at engaging students worldwide in its programs as participants learn to assimilate, organize, and share their knowledge with others around the world. Another partnership that continued this year was *Marco Polo*. This initiative, provides access to daily classroom planning materials, brief and extended lesson plans, reviewed and expert-approved links to related high-quality sites, and powerful search engines, all provided by some of the most well-respected educational content organizations in the country

The E-rate is the *Universal Service Fund* initiative which provides discounts to schools and libraries for telecommunications costs. LCET-sponsored workshops, video-conferences, and phone conferences have assisted schools and systems in Louisiana in earning savings of **\$82,277,090 million** in the last two years of the program.

The *Computers for Louisiana's Kids (CLK)* statewide program, created two years ago through a partnership with the nonprofit Louisiana Corporate Recycling Council (LCRC), the Louisiana Department of Education, the Governor's School to Work initiative, various state agencies, and school districts, continues to provide computers for classrooms while training students to be computer technicians. The program, coordinated by the LCRC, works with school districts and prisons to implement computer training, repair, and recycling programs designed to provide students and inmates with marketable job skills. As part of this program, donated computers are tested and repaired, or salvaged for recyclable materials. Since August 1999, **over 2500 computers** have been placed in classrooms (1500 refurbished by CLK students and over 500 not requiring refurbishing at all.

The Director and staff have also worked with the state and school systems to look at funding issues more globally and to try to consolidate plans for spending. When applying for grants, applicants were required to include a list of their *Community and Business Partnerships*, with a clear explanation of their roles and contributions in the forms of financial support, equipment, personnel, an/or other resources. The involvement of state-approved nonpublic schools and systems had to be explained, and applicants had to describe how they would continue to involve these groups and *Teaching, Learning, and Technology Council* members had to be identified.

Grants to districts and schools also were a cost-effective means of reducing disparities for the state, because applicants were required to target children living in poverty specifically and/or reach out to under served groups. The Department applied for and received a **\$10,167,818** Technology Literacy Challenge Grant for the 2000-2001 school year which was made available to districts and schools through an application procedure.

The K-12 Online Database initiative that was implemented last year continues to provide access to high-quality informational resources via the Internet. Teachers and students in all Louisiana schools are provided unlimited access to a collection of subscription-based products from the GALE Group and World Book, Inc. Twenty-seven (27) workshops throughout the state enabled 3 participants to learn to successfully use the online resources to support effective use of the Louisiana Content Standards.

The LCET has on-going communications with all schools and districts, all committees and organizations in the state as well as regional and national groups involved with educational technology. They have communicated funding opportunities via email, their web page, and videoconferences.

Objective 6. Public Awareness

The video tape entitled *Technology In Louisiana's Classrooms 2000-2001* was produced as part of the 2000-2001 *Evaluation of the Louisiana Technology Initiative* and shared extensively to develop awareness of "best practices" that can be used as models. It is shared at all professional development sessions held at LCET. The video has also been produced in CD format.

Business people, higher education representatives, and telecommunications representatives have served on the State Technology Advisory Committee. LCET's web page and workshops as well as state meetings and conference presentations have provided avenues for exchanging educational technology information. Louisiana Public Broadcasting (LPB) system representatives serve on the STAC and have helped with the distance learning component. LCET and LPB have collaborated in providing announcements and workshops.

SUMMARY

The Louisiana Technology Initiative began in 1987 with the use of funds from the Louisiana Educational Quality Support Fund (LEQSF), commonly called the 8(g) fund. In the 13 years since then, additional funds were allocated by the state and more were received from the federal government to continue the purchase and implementation of technology in schools. In 1997 the state legislature created the Classroom Based Technology Fund (CBTF) with a \$38.2 million allocation. In following years allocations from that fund were \$24,150,000 in 1998 and \$14,037,250 in 1999. From the federal government, Louisiana received a \$5.3 million allocation from the Technology Literacy Challenge Fund (TLCF) in 1997. Additional allocations of \$10,272,800 in 1998 and \$10,592,272 for the 1999-2000 school year were received.

The Louisiana Center for Educational Technology (LCET) was created within the Louisiana Department of Education to administer the funds and carry out the mandates of the granting agencies. Louisiana continues its commitment to improve education through the integration of technology and learning through the awarding of these grant moneys to continue efforts to carry out the State Educational Technology Goal: All educators and learners will have access to technologies that are effective in improving student achievement.

In concert with the state technology goal, the four national goals also serve as a driving force in the development of state, district, local and school plans. The federal goals are: 1) All teachers will have training and support they need to help all students learn through computers and through the information superhighway; 2) All teachers and students will have modern computers in the classroom; 3) Every classroom will be connected to the information superhighway; and 4) Effective and engaging software and on-line resources will be an integral part of every school curriculum. These goals provided direction for schools and districts in the development of their proposals, as well as the backbone of the evaluation instruments used to collect data on the accomplishment of applicants' goals.

Four new on-line data collection instruments were designed this year to better accommodate the needs of the state and federal granting agencies, and to provide immediate feedback to participants. For all instruments, questions were clustered around state and national goals, to provide indicators of the level of attainment of each. As school systems addressed the six objectives of the State Technology Plan and the four National Goals, it was obvious that their strategies and accomplishments in 1999-2000 were guided by these goals.

The availability and extent of the use of technology in state schools is always important to stakeholders. The Louisiana District Technology Survey and the Louisiana School Technology Survey collected data on these fronts. In June 2000, the student to computer ratio for public schools was 5.5:1, when considering all types of computers. The state has reduced the ratio from 8:1 in 1997, and brought it very close to the National goal of 5 students to each computer. For the non-public schools the ratio was 6.3:1. When only high-end computers are considered, the ratio is 8.2:1 for public and 8.5:1 for non-public schools. The state has made remarkable progress in this area, decreasing the ratio from 48:1 for both public and non-public schools in 1997.

The percentage of computers with Internet access increased in 2000 to 54% from 49% in 1999 for public and to 69% from 61% for non-public schools. Ninety-four percent (94%) of the public schools and 97% of the non-public schools have Internet access, almost

doubling the rates in 1997. Internet connections via direct link increased from 76% to 91% for public and from 61% to 77% for non-public schools this year.

The percentage of public school teachers at the Beginner level in using technology has dropped from 41% in 1999 to 33% in 2000; non-public Beginners dropped from 37% to 24%. The Intermediate levels of 41% and 37% respectively showed small gains, but Advanced and Instructor percentage levels dropped in both categories compared to last year. Concerning training and support for teachers, 91% of public and 87% of non-public schools reported having a person responsible for supporting teachers and assisting them with the integration of technology into the curriculum. The same percentages, 91% public and 87% non-public, have a person who helps to maintain and support hardware and software in the schools. Sixty-three percent (63%) of public and 53% of non-public schools are now requiring that teachers demonstrate technology skills for employment at their schools.

Data on the number of students participating in distance learning were collected for the first time this year, and revealed that 7481 (1%) of the state's public school students and 2947 (3%) of non-public school students participated. Most were taking courses via Web-based learning and telelearning. A smaller number participated in satellite classes. The percentages of schools with students who participate in distance learning and the percentages of teachers who participate in distance learning both showed rather large decreases in both 1999 and 2000. However schools and districts are providing other resources. Public schools budgeted a total of \$4,349,286.39 for technology, which included computer hardware and other peripherals, software, professional development, telecommunications, networking, distance learning, and service and support. Non-public schools budgeted \$4,685,049.11 for technology. At the district levels, public school technology budgets totaled \$64,672,958 and non-publics totaled \$2,122,623. In addition, technology coordinators reported the dollar value of their E-rate discounts to be \$33,833,413 for the 1999-2000 school year.

Long-range planning for technology has been instrumental to the tremendous gains since the statewide technology initiatives began in 1997. Since long-range District Technology Plans were required in the Application for CBTF/TLCF funds, 100% of the districts have had them for several years. In 1999-2000 however, 63% of public districts revised their plans, as well as 73% of the dioceses and non-public schools. Table 1 contains data from four years of technology surveys.

The Evaluation of Training Form was designed to provide feedback on all technology training sessions that occurred during the 1999-2000 school year. In reality it was not available on-line until January 2000, but some presenters did post results of sessions occurring before that. Data show that 1,343 professional development sessions were presented in Louisiana involving 12,755 participants, of which 10,837 were teachers. Sessions were in the categories of: LA INTECH, Integration of Technology, Application Software/Skills Training, Technical Support Training, and Administrative Training/Issues. Ratings on the overall effectiveness of training sessions on a scale of 5 to 1, (5= Excellent and 1= Did not meet expectations) provided mean scores of 4.64 for public school teachers and 4.68 for non-public school teachers, indicating that participants were very pleased with the sessions. Table 2 furnishes further details.

End of Year Reports were revised for the 1999-2000 surveys to better match USDE on-line surveys that request the same data, and were completed by districts, dioceses, non-public schools, and consortia receiving professional development grants. As school systems aligned their goals, measures, and results with the six objectives in the state technology plan and the four national goals, it was obvious that their accomplishments

were impressive. More districts and schools chose to gauge goal attainment with student achievement measures than in previous years.

School systems, both public and non-public, had plans for equipping their buildings with technology, connecting to the Internet, creating learning environments rich in technology, and providing staff development for teachers, administrators, and staff, especially INTECH Training. This year, more districts and schools chose to measure progress with student standardized test scores and other measures important in the state, such as LEAP and GEE scores and State Accountability Plan measures. Towards this end, more school systems planned to integrate technology into the curriculum, incorporate state content standards into local curricula, and hire and train facilitators to assist teachers in that process. There was increased interest in implementing policies concerning ethical and legal issues.

Districts and schools sought more and better partnerships with businesses, foundations, and other governmental agencies and funds, such as 8(g), E-rate, Title I and Special Education. They promoted public awareness through press coverage, presentations to school boards and community groups, and developed school and district Web pages for disseminating news and providing schedules, assignments, report cards, courses, and links to sites of interest to educators. On the rubrics (5 point scale) measuring attainment of the four National Goals, mean scores increased over the 1999 results for public schools on all four goals. Non-public schools' mean score decreased for Goal 1, but increased on all others.

Professional Development Grants were offered to consortia of districts, dioceses and universities on a competitive basis. With these funds, five additional regional training centers, known as Teaching, Learning, and Technology Centers (TLTCs), were established, bringing the total to nine. At these centers, 2222 educators participated in LA INTECH, evaluation, technical support and other sessions, dramatically increasing the number of educators trained and maximizing the moneys spent on professional development.

The Louisiana Technology Initiative for 1999-2000 has demonstrated a significant gain compared to previous years. In the first three years, the Initiative was very successful in placing technology into classrooms, and providing rich resources and basic introductory training for faculties and staffs. In this fourth year, tremendous gains have been made in professional development of all educators for integrating technology into curricula and for using that training as a reform agent for all teaching and learning in Louisiana. State accountability plan measures, especially student achievement scores, appeared in plans and goals more than ever before, indicating that many districts and schools have the hardware and trained personnel in place, and are now focusing of real changes in teaching and improvements in student performances.

The Governor, Legislature, Board of Elementary and Secondary Education, Louisiana Department of Education, Louisiana Center for Educational Technology and participating businesses and industry are to be applauded for their vision, leadership, funding, and active support of this Initiative. The school children of Louisiana are the benefactors of this continuing program, and in subsequent years, the State at large. In order for this Initiative to support the State Accountability Plan, the stakeholders must continue to fund purchases of hardware and software, provide facilities, opportunities and funding for professional development and ensure that universities provide pre-service teacher education programs and partnerships with practicing teachers that ensure appropriate content area knowledge and skills to integrate technology into the curricula.

RECOMMENDATIONS

1. LCET and the Louisiana Department of Education is encouraged to make optimum use of the comprehensive databases of information collected from the on-line surveys completed this year. By continuing to develop queries, new insights can be made into causes and correlations that did or could affect the attainment of state and national technology goals.
2. Technology coordinators should be encouraged to study and use data from the School and District Technology Surveys, Evaluation of Training Forms, and End of Year Reports to determine deficiencies, areas of need, and efficient budgeting of future Technology Initiative funds. If necessary, workshops should be designed for teaching participants how to develop queries and analyze the results. This would enable local planning teams to better focus on explicit needs of their districts or schools, as well as help to efficiently accomplish state and national technology goals.
3. Work closely with grantees during the Application process to develop improved evaluation procedures. During the Review process, ascertain that goals and measures correlate.
4. Continue to offer sessions for state and district administrators, such as LEADTech, that equip them with technology skills and expertise in the integration of technology into the curriculum.
5. Encourage more districts to use the Louisiana K-12 Technology Guidelines when planning goals, and designing curriculum and evaluation measures
6. Encourage districts and schools to revise their technology plans to reflect changes in the State Technology Plan.
7. Continue to develop INTECH 2 professional development initiatives for all content areas and grade levels.
8. Continue to strengthen partnerships with universities at both the state and district levels, and share resources for better preparation of pre-service teachers.
9. Expand the Distance Learning initiative, and move forward toward Web-Based Learning environment for both students and teachers, while phasing out older formats, such as Telelearning and Satellite.
10. Seek ways to merge the Technology Initiatives and the state Accountability Program in ways that accomplish the mutual attainment of improved student achievement, so that goals of both programs are accomplished simultaneously.
11. As this report shows, substantial progress is being made by districts, schools, and the state towards attainment of the State and federal technology goals. The Legislature needs to continue to fund the Classroom Based Technology Fund, not only to forge ahead with new products and programs, but also to provide monies for maintaining and updating the present technology.

12. The State Department of Education should continue to seek TLCF grants and other federal funds to supplement the CBTF moneys from the state. The Louisiana Technology Initiative is beginning to make measurable differences not only in the integration of technology into curricula, but in the state's school reform efforts as well, through the professional development activities funded primarily with the federal funds. Continuation of these efforts at this point is crucial.

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4. To help practicing teachers improve knowledge of content areas they are teaching as well as technology skills for improving teaching and learning, the Louisiana Department of Education should provide additional money for tuition, substitute teachers, travel, and other resources, as well as release time for professional development. Lack of funds for these purposes was cited as a major problem in many End Of Year Reports.

5. All colleges and departments of education should include their faculties in professional development to ensure that pre-service teachers are technology literate and ready to appropriately use technology when they enter the classroom.

6. LCET should continue to provide the means and training for programs that are especially suited to, or only possible through, technology. This would include the distance learning projects, such as the Louisiana Virtual Classroom, Internet courses and degree programs for educators, and on-line databases and services that are offered free to teachers and students through state contracts with the providers.

7. Applicants for CBTF/TLCF funds must be encouraged to develop more measurable goals, and make sure that measures and results relate to those goals. They should be encouraged to measure goal attainment with student achievement indicators whenever possible or relevant. Some may need assistance in this area during the Review Process.

8. The Legislature needs to continue to fund the Classroom Based Technology Fund (CBTF). The student to computer ratio is now near the national goal of 5.0:1 statewide, but far below it in many districts, schools, and classrooms. Rural areas are especially needy. Also, moneys needed to maintain and update the present technology must come from state appropriations and could be included in the CBTF funding.

9. The State Department of Education should continue to seek TLCF grants and other federal funds to supplement the CBTF moneys from the state. The Louisiana Technology Initiative is beginning to make measurable differences not only in the integration of technology into curricula, but in the state's school reform efforts as well, through the professional development

activities funded primarily with the federal funds. Continuation of these efforts at this point is crucial.

10. Professional development of educators must continue, not only in technology, but for upgrading content area knowledge, especially at the lower grade levels where schools are linking Technology Initiatives to Accountability efforts. Partnerships with state and national initiatives and funding projects should be continued and increased to accomplish this huge task. The technology initiative should become a primary partner in State Accountability Plan activities at the district and school levels.

APPENDIX A

Louisiana's Classroom-Based Technology Fund and Technology Literacy Challenge Fund

Application Packet for Technology Improvement Grants - 2000-2001

APPENDIX B

Louisiana Technology Literacy Challenge Fund State Grants Application Packet for Professional Development/Leadership Grants - 2000-2001

APPENDIX C

Classroom-Based Technology Allocations for Public Schools

Fiscal Year 2000-2001

APPENDIX D

Louisiana Technology Literacy Challenge Fund Professional Development/Leadership Grant Allocations 2000-2001

APPENDIX E

Classroom-Based Technology Allocations for Nonpublic Schools 2000-2001

APPENDIX F

The Louisiana District Technology Survey - 2000-2001

APPENDIX G

The Louisiana School Technology Survey - 2000-2001

APPENDIX H

Evaluation of Training Form - 2000 - 2001

APPENDIX I

End of Year Report for Districts and State Schools - 2000-2001

APPENDIX J

End of Year Report for Non-Public Schools

and

Professional Development/Leadership Grants - - 2000-2001

APPENDIX K

Technology Literacy Challenge Fund Subgrant Evaluation Form - 2000-2001

Appendix L

A Comparison of Louisiana School Technology Surveys 1999-2000 and 2000-2001

Appendix L

A Comparison of Louisiana School Technology Surveys 1999-2000 and 2000-2001				
State Technology Goal				
Item	Public Schools 1999-2000	Public Schools 2000-2001	Non-Public Schools 1999-2000	Non-Public Schools 2000-2001
1. Percent of schools having Internet Access	94%	94%	97%	96%
1a. Type of Internet connection in schools:				
Direct Link	91%	93%	77%	87%
Phone Modem	9%	7%	22%	12%
Satellite	0%	0.3%	1%	1%
1b. Bandwidth capacity for Direct Link.				
56kb	14%	10%	10%	14%
T1	71%	75%	24%	37%
ADSL	0%	0.3%	6%	9%
T3	1%	3.3%	0%	0.6%
Cable modem	2%	1.4%	5%	6%
ISDN	2%	2%	32%	24%
Other	0%	0%	0%	0%
2a. Average number of rooms in each category per school.				
Instructional rooms	31.14	31.65	22.91	22.96
Instructional rooms, computer labs, and Library/Media Centers	33.95	34.30	25.67	25.51
2b. Average number of rooms with Internet access per school.				
Instructional rooms	17.29	21.49	12.67	15.66
Instructional rooms, computer labs, and Library/Media Centers	19.52	23.82	14.86	17.93
2c. Average number of "all types" computers in each category per school.				
Instructional rooms	49.12	54.42	32.57	36.16
Instructional rooms, computer labs, and Library/Media Centers	86.56	93.37	68.55	74.39
2d. Average number of PowerPC/Pentium class computers in each category per school.				
Instructional rooms	30.82	39.73	22.47	27.44
Instructional rooms, computer labs, and Library/Media Centers	57.63	70.49	50.55	59.65
2e. Average number of computers with Internet access in each category. per school.				
Instructional rooms	23.82	33.25	19.70	26.07
Instructional rooms, computer labs, and Library/Media Centers	45.68	61.24	46.21	57.74
3. Percent of schools that can be accessed via the Internet.	55%	70%	58%	72%
3a. Percents of schools where each type of information that can be accessed via the Internet. *				
Schedules	11%	22%	19%	32%
Homework Assignments/Help	10%	22%	15%	48%
Report Cards/Attendance	4%	6%	0.4%	1%
Community Information	24%	48%	32%	57%
Teacher/School Information	49%	92%	54%	88%
Courses	10%	18%	21%	32%
Other	27%	52%	24%	62%

Item	Public Schools 1999-2000	Public Schools 2000- 2001	Non-Public Schools 1999-2000	Non-Public Schools 2000-2001
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*Total exceeds 100% due to multiple responses

National Technology Goal 1

4. Percent of schools with a school-based person responsible for providing teachers with support and assistance in <u>integrating technology into the curriculum</u> . Position is Full-time Position is Part-time Part-time position held by full-time teacher, duties are above teaching responsibilities.	53% 13% 87% 83%	60% 15% 85% 88%	81% 39% 61% 77%	91% 42% 58% 70%
5. Percent of schools with a person not school-based who is responsible for providing teachers with support and assistance in integrating technology into the curriculum Person is: District Staff School level Support/Classified Staff School level Licensed/ Certificated Staff Library/Media Specialist Contractual Agreement Students Parents/Community members Regional Centers	80% 78% 3% 2% 3% 7% 0% 2% 7%	84% 97% 3% 2% 3% 11% 1% 3% 16%	35% 18% 3% 0.8% 2% 8% 0.8% 13% 5%	37% 51% 12% 4% 4% 27% 7% 36% 24%
6. Percent of schools having a school-based person who is responsible for technical maintenance and/or support of hardware. * Position is Full-time Position is Part-time Part-time position held by full-time teacher, duties are above teaching responsibilities**	38% 12% 88% 86%	47% 15% 85% 90%	68% 39% 61% 68%	70% 40% 60% 65%
7. Percent of schools with a person not school-based who is responsible for providing teachers with support and assistance in integrating technology into the curriculum* Person is: * District Staff School level Support/Classified Staff School level Licensed/Certificated Staff Library/Media Specialist Contractual Agreement Students Parents/Community members Regional Centers	86% 79% 3% 1% 2% 21% 0.7% 2% 1%	91% 94% 3% 1 % 1% 23% 2% 3% 3%	55% 8% 2% 1% 2% 33% 1% 23% 1%	62% 10% 5% 0% 1% 70% 5% 37% 2%
8. Percent of schools that offer professional development for upgrading technology and computer skills.	85%	86%	93%	95%

*Total exceeds 100% due to multiple responses

Item	Public Schools 1999-2000	Public Schools 2000- 2001	Non-Public Schools 1999-2000	Non-Public Schools 2000-2001
8a. Percent of professional development by each provider:*				
School	54%	68%	67%	85 %
District/parish	66%	83%	53%	56 %
State	9%	12%	19%	15%
Region	17%	20%	27%	16%
University/Other	12%	11%	19%	10%
9. Average number of teachers per school participating in training in the integration of technology in instruction.				
None	2.96	3.05	2.64	1.94
1-5 hours	9.30	9.71	8.81	12.01
6-8 hours (1 day)	3.86	6.45	9.21	7.99
7 day LA INTECH	1.84	2.20	2.82	1.23
45 hour university course	0.58	0.52	0.33	0.34
10 Percent of schools offering release time to teachers for training in the integration of technology in instruction.	54%	58%	72%	79%
10a. Average number of hours of release time offered to teachers for training in the integration of technology in instruction.				
For schools offering release time	43.74	37.15	33.85	41.14
For all schools in state	22.45	21.46	24.34	4.48
11. Percent of teachers' and school administrators' skill levels in use of technology.				
<u>Teachers</u>				
Non-User	7%	6%	5%	3%
Beginner	33%	28%	24%	24%
Intermediate	44%	48%	48%	49%
Advanced	12%	14%	18%	19%
Instructor	4%	4%	5%	5%
<u>School Administrators</u>				
Non-User	5%	3%	4%	3%
Beginner	28%	20%	17%	17%
Intermediate	46%	56%	45%	49%
Advanced	17%	18%	30%	25%
Instructor	4%	3%	4%	6%
12 Percent of schools that provided each type of professional development during the 2000-2001 school year.				
Introduction-Basic Computer Literacy	36%	28%	52%	35%
Administrative Training Issues	21%	21%	29%	30%
Technical Support Training	23%	20%	33%	26%
Application Software/Skills Training	60%	60%	76%	76%
Integration of Technology	48%	48%	69%	70%
Louisiana INTECH	27%	32%	28%	25%
Assistive Technology Training		11%	7%	6%

Item	Public Schools 1999-2000	Public Schools 2000- 2001	Non-Public Schools 1999-2000	Non-Public Schools 2000-2001
<hr/>				
12a. Average number of educators per school who participated in professional development provided by the school.				
<u>Teachers (average per school)</u>				
Introduction-Basic Computer Literacy	5.32	4.14	7.00	3.37
Administrative Training Issues	1.26	1.24	1.38	2.21
Technical Support Training	1.78	1.80	2.42	2.29
Application Software/Skills Training	11.26	12.89	13.7	14.78
Integration of Technology	9.18	9.93	10.55	12.97
Louisiana INTECH	1.39	1.79	1.00	0.99
Assistive Technology Training	0.33	0.48	0.43	0.16
<u>School Administrators (average per school)</u>				
Introduction-Basic Computer Literacy	0.35	0.23	0.77	0.33
Administrative Training Issues	0.36	0.38	0.86	0.73
Technical Support Training	0.15	0.13	0.47	0.38
Application Software/Skills Training	0.75	0.7	1.41	1.24
Integration of Technology	0.42	0.5	0.89	0.92
Louisiana INTECH	0.06	0.09	0.07	0.06
Assistive Technology Training	0.02	0.05	0.16	0.03
13. Percent of schools requiring teachers to demonstrate technology skills for employment.	63%	80%	53%	65%
1. Percent of teachers who address technology skills in their individual professional development plans.	11%	12.%	18%	23%
National Technology Goal 2				
15. Percent of schools that have at least one computer in <u>every</u> instructional room.	11%	66%	18%	68%
16. Percent of schools that have at least one <u>Power PC/Pentium class multimedia</u> computer in <u>every</u> instructional room.	38%	48%	38%	50%
16a. For those who answered "No" to 16, average number of rooms per school that <u>do not</u> have at least one <u>Power PC/Pentium class multimedia</u> computer in every instructional room.	9.32	13.10	6.80	9.55
17. Laptops that are available for teacher and/or student use:				
Total available	1759	2218	1577	1718
Average number per school	1.20	1.51	6.51	8.50
17.a. Laptops that have Internet access:				
Total available	851	1323	1392	1526
Average number per school	1.00	0.90	5.75	7.55
18. Computers purchased with school funds:				
Total	3018	3345	2013	1313
Average number per school	2.06	2.28	8.31	6.5

Item	Public Schools 1999-2000	Public Schools 2000- 2001	Non-Public Schools 1999-2000	Non-Public Schools 2000-2001
19. Percent of schools using appropriate Assistive Technology Devices to accommodate students with disabilities.	51%	69%	33%	37%

National Technology Goal 3				
20. Percent of schools with teachers who participate in Distance Learning.	14%	19%	15%	12%
21. Percent of schools that have at least one computer with Internet access in EVERY instructional room.	63%	45%	67%	37%
21a. Average number of instructional rooms that <u>do not</u> have at least one computer with Internet Access.	12.37	9.26	9.28	6.47
22. Percent of schools that provide email accounts for teachers.	66%	76%	61%	61%
23. Percent of schools that provide email accounts for students.	4%	4%	10%	8%
24. Percent of schools connected to computers in other classrooms, labs, media centers, and/or offices through a LAN (local area network).	72%	80%	75%	83%
25. Percent of schools connected to another school schools through a WAN (wide area network).	61%	65%	13%	13%
National Technology Goal 4				
26. Percent of schools that provide Internet access to educators at home.	17%	16%	9%	4%
27. Percent of schools with students participating in Distance Learning.	10%	11%	10%	8%
27a. For those who responded "Yes" for 27, average number of <u>students</u> per school participating in Distance Learning. Average per participating school Average for the state	50.59 5.11	36.54 3.91	130.42 12.93	43.88 3.48
28. Number of students taking courses in Distance Learning, per method :				
Satellite,	1267	1492	480	325
Interactive Video (Compressed)	1219	607	60	1
Web-Based	2529	1815	1070	212
Telelearning	1817	1838	123	164
TOTAL	6832	5752	1733	702

Item	Public Schools 1999-2000	Public Schools 2000- 2001	Non-Public Schools 1999-2000	Non-Public Schools 2000-2001
29. Percent of schools where teachers utilize web resources for instructional support and activities. *	90%	96%	95%	99%
Percent that use:				
School Web Page	27%	40%	35%	49%
District Web Page	46%	67%	18%	27%
Louisiana Department of Education Web site	73%	91%	57%	71%
LA Department of Education Making Connections site	47%	60%	29%	39%
Louisiana Challenge Web site	26%	31%	24%	22%
On-line libraries/databases	66%	86%	75%	90%
Other Web sites	83%	93%	90%	96%
30. Percent of schools that purchased software for use in instructional rooms.	76%	76%	86%	86%
31. Percent of schools that have license agreements for each piece of software purchased for school use.	82%	90%	91%	95%
State Requirements – Long Range Planning				
32. Percent of schools having a School Technology Plan.	86%	90%	93%	97%
<u>Percent of Plans written for:</u>				
1 year	16%	19%	4%	6%
2-4 years	48%	46%	45%	44%
5 or more years	37%	38%	51%	49%
<u>Percent of plans last reviewed in</u>				
1997	18%	15%	9%	17%
1998	14%	5%	9%	7%
1999	47%	14%	51%	15%
2000	21%	44%	31%	37%
2001	*	23%	*	60%
<u>Percent of plans last revised in:</u> *				
1997	22%	19%	14%	8%
1998	15%	8%	12%	11%
1999	43%	17%	43%	12%
2000	20%	41%	31%	40%
2001	**	67%	**	72%
<u>Technology plan provides for staff training in:</u>				
-				
Software licensing	37%	47%	38%	42%
Copyright laws and issues	33%	45%	38%	49%
Internet Filtering	34%	45%	50%	57%
Acceptable Use Policies	76%	89%	83%	96%
33. Percent of schools that have a school budget for technology.	24%	22%	71%	82%

Item	Public Schools 1999-2000	Public Schools 2000- 2001	Non-Public Schools 1999-2000	Non-Public Schools 2000-2001
33a. Total amounts budgeted in school budgets:				
Computer Hardware/Peripherals	\$2,759,275.00	\$1,548,016.89	\$1,970,964.95	\$ 2,016,210.39
Software	569.224	348,099.43	563,574.49	546,462.88
Professional Development	275,001.00	274,017.00	325,152.00	232,229.00
Telecommunications (<i>Internet, Long Distance, etc.</i>)	95,802.00	76,256.07	509,709.75	567,034.40
Networks	115,941.00	59,178.00	308,803.00	258,867.00
Distance Learning (<i>Cable TV, Satellite, etc.</i>)	12,340.00	18,873.80	4,616.00	6,600.00
Service/Support	196,850.00	183,129.33	518,283.88	652,984.75
Other (<i>including supplies</i>)	314,852.00	285,918.54	483,945.04	463,226.67
Total School Technology Budget	\$4,349,285.00	\$ 2,793,489.06	\$4,685,049.11	\$ 4,743,615.09
* Total exceeds 100% due to multiple responses ** Not Applicable				

APPENDIX M

A Comparison of Louisiana District Technology Surveys 1999-2000 and 2000-2001

Appendix M

A Comparison of Louisiana District Technology Surveys 1999-2000 and 2000-2001						
Item	Public Schools 1999-2000	Public Schools 2000-2001	Difference	Non-Public Schools 1999-2000	Non-Public Schools 2000-2001	Difference
State Technology Goal						
1. Percent of administration buildings having access to the Internet.	99%	100%	1%	100%	100%	0%
1a. Type of Internet connection in administration buildings:						
Direct Link	99%	100%	1%	71%	71%	0%
Phone Modem	2%	0%	- 2%	29%	29%	0%
Satellite	0%	0%	0%	0%	0%	0%
1b. Bandwidth capacity for Direct Link						
56kb	6%	1%	- 5%	0%	0%	0%
T1	88%	86%	- 2%	20%	20%	0%
ADSL	0%	0%	0%	0%	0%	0%
T3	3%	11%	8%	0%	0%	0%
Cable modem	0%	0%	0%	20%	20%	0%
ISDN	0%	0%	0%	60%	60%	0%
Other	0%	0%	0%	0%	0%	0%
3. Percent of districts where information can be accessed from an outside location via the Internet .	73%	86%	13%	86%	100%	14%
3a. Percent of districts where each type of information can be accessed from the Internet .*						
District Calendar	54%	74%	20%	43%	57%	14%
Information on School Board Members	55%	69%	14%	0%	14%	14%
School Board Agenda and Minutes	15%	28%	13%	0%	0%	0%
Information on District Staff	56%	78%	22%	43%	71%	28%
District Newsletter	15%	25%	10%	14%	29%	15%
On-line courses	4%	6%	2%	0%	14%	14%
Other	55%	65%	10%	86%	100%	14%
4. Percent of districts that have an Intranet WAN (district-wide Internet) for communication within the district	79%	83%	4%	29%	29%	0%
5. Percent of district providing Distance Learning for students.	65%	67%	2%	57%	57%	0%
5a. Number of students participating in Distance Learning.	3007	3667	660	30,003	690	- 29,313
5b.. Percent of districts providing each type of Distance Learning to students:						
Satellite	44%	43%	1%	0%	14%	14%
Interactive Video (compressed)	14%	18%	4%	14%	0%	-14%
Web-based	8%	22%	14%	14%	29%	15%
Telelearning	37%	43%	6%	43%	43%	0%

6. Percent of districts having anyone responsible for providing teachers with support and assistance in integrating technology into the curriculum.	96%	96%	0%	100%	100%	0%
Percent of Full-time persons	56%	49%	- 7%	44%	33%	- 11%
Percent of Part time persons	95%	51%	- 44%	5%	67%	- 62%
Number of Full-time persons	100	109	9	105	3	- 102
Number of Part-time persons	78	112	34	5	6	1
*Total exceeds 100% due to multiple responses						

National Technology Goal 1						
7. Percent of districts having anyone responsible for providing technical maintenance and/or support of hardware.	87%	93%	6%	43%	43%	0%
Percent of Full-time persons	61%	64%	3%	39%	33%	- 6%
Percent of Part time persons	33%	36%	3%	67%	67%	0%
Number of Full-time persons	144	164	20	1	1	0
Number of Part-time persons	92	93	1	2	2	0
8. Percent of districts providing professional development in instructional technology:*						
INTECH Courses	85%	88%	3%	57%	43%	- 14%
During school Workshops	72%	68%	- 4%	57%	57%	0%
After School Workshops	90%	89%	- 1%	71%	71%	0%
Saturday Workshops	73%	68%	- 5%	57%	57%	0%
Conferences	70%	76%	6%	43%	29%	- 14%
Site Visitations	50%	60%	10%	57%	71%	14%
Individual Tutorials	41%	49%	8%	29%	43%	14%
Video/CD Tutorials	25%	32%	7%	29%	14%	- 15%
On-line Tutorials	18%	22%	4%	0%	0%	0%
Summer Institutes	46%	53%	7%	43%	57%	14%
University Courses	38%	47%	9%	29%	29%	0%
Mentoring	45%	54%	9%	29%	43%	14%
On-line Communications	28%	38%	10%	14%	43%	29%
Teaching, Learning, and Technology Center Workshops	63%	75%	12%	57%	57%	0%

9. Hours per school year each district offered professional development during the school year for each employee group to learn or upgrade technology and computer skills.						
<u>Teachers</u> (total hours)						
Introduction-Basic Computer Literacy	2,133	1,641	- 492	44	41	- 3
Administrative Training Issues	521	463	- 58	46	58	12
Technical Support Training	1,499	1,433	- 66	19	32	13
Application Software/Skills Training	6,173	5,062	-1,111	112	335	223
Integration of Technology	4,019	4,892	873	728	593	135
Louisiana INTECH	27,213	27,643	430	348	392	44
Assistive Technology Training	**	**	**	**	**	**
<u>School Administrators</u> (total hours)						
Introduction-Basic Computer Literacy	2,377	2,454	77	37	34	- 3
Administrative Training Issues	791	975	184	56	74	18
Technical Support Training	296	188	-108	22	32	10
Application Software/Skills Training	1,352	1,818	466	70	326	256
Integration of Technology	565	957	392	634	440	- 194
Louisiana INTECH	3,149	3,725	576	295	224	- 71
* Total exceeds 100% due to multiple responses						
** Data not available						
<u>District Administrators</u> (total hours)						
Introduction-Basic Computer Literacy	634	700	66	12	13	1
Administrative Training Issues	508	773	265	66	96	30
Technical Support Training	522	262	- 260	8	14	6
Application Software/Skills Training	948	1,489	541	14	228	214
Integration of Technology	331	658	327	246	276	30
Louisiana INTECH	2,479	3,424	945	12	64	52
10. Percent of districts requiring teachers to demonstrate technology skills for employment.	2%	1%	- 1%	43%	43%	0%
10a. Percent of districts using each type of evaluation of teachers' technology skills: *						
Transcripts	100%	100%	0%	100%	100%	0%
Hands-on Evaluation	0%	0%	0%	67%	67%	0%
Professional Development hours	0%	0%	0%	67%	67%	0%
Other	0%	0%	0%	100%	100%	0%
11. Percent of districts offering release time to teachers for technology training. * ?????	79%	81%	2%	71%	71%	0%
2 days or less	22%	33%	11%	2%	40%	38%
3 - 5 days	22%	40%	18%	2%	40%	38%
More than 5 days	12%	28%	16%	1%	20%	19%
12. Percent of districts providing Distance learning opportunities for teachers.	31%	46%	15%	0%	0%	0%
13. Percent of districts providing Internet services/access accounts to educators at their homes.	23%	20%	- 3%	0%	0%	0%

National Technology Goal 2						
14. Percent of districts that have at least one computer in EVERY instructional room	26%	33%	7%	43%	43%	0%
15. Percent of districts that have at least one PowerPC/Pentium class computer in EVERY instructional room.	15%	25%	10%	14%	29%	15%
15.a. Number of instructional rooms that <u>do not</u> have at least one Power PC/Pentium computer.	11,556	9,154	- 2,402	1,594	1,001	- 593
16. Percent of districts that have classrooms that were developed based on the Model Classroom in the Louisiana State Technology Plan.	32%	39%	7%	0	14%	14%
Total Model Classrooms in the state	1,801	2,577	776	0	21	21
Number of students impacted	67,783	92,042	24,259	0	312	312
Number of teachers impacted	2,145	3,535	1,390	0	21	21
17. Numbers of computers purchased with <u>district</u> funds.	4,567	4,973	- 406	316	187	129
* Total exceeds 100% due to multiple responses						
National Technology Goal 3						
18. Percent of districts having at least one computer with Internet access in EVERY instructional room.	23%	31%	8%	14%	29%	15%
19. Percent of districts that have administration building(s) and schools in the district connected to each other through a WAN (wide area network).	86%	92%	6%	14%	14%	0%
19a. Percent of districts providing Internet services through a WAN (wide area network). **	95%	95%	0%	0%	100%	100%
20. Percent of districts having ALL schools connected to a district WAN.	83%	89%	6%	14%	14%	0%
21. Percent of district Superintendents that communicate with schools through E-mail.	73%	85%	12%	100%	100%	0%
22. Percent of districts having a Compressed Video site.	32%	43%	11%	0%	0%	0%
School-based	16%	71%	55%	0%	0%	0%
District-based	7%	29%	22%	0%	0%	0%
National Technology Goal 4						

23a. Percent of districts providing each type of distance learning for STUDENTS:*						
Enrichment coursework via satellite	35%	32%	- 3%	0%	0%	0%
Required coursework via satellite	20%	22%	2%	0%	0%	0%
On-line projects	20%	26%	6%	14%	14%	0%
On-line Coursework	10%	18%	8%	0%	26%	26%
Interactive Video (compressed)	10%	14%	4%	0%	0%	0%
23b. Percent of districts providing each type of distance learning for TEACHERS:: *						
Enrichment coursework via satellite	14%	15%	1%	0%	0%	0%
Required coursework via satellite	4%	4%	0%	0%	0%	0%
On-line projects	20%	28%	8%	14%	14%	0%
On-line Coursework	14%	28%	14%	0%	0%	0%
Interactive Video (compressed)	17%	31%	14%	0%	0%	0%
Professional Development	28%	46%	18%	0%	0%	0%
University courses	31%	44%	13%	0%	0%	0%
24. Percent of districts that have a person responsible for monitoring: *						
Software Licensing	87%	90%	3%	72%	71%	- 1%
Copyright Issues	80%	85%	5%	57%	57%	0%
Internet Filtering	94%	97%	3%	72%	71%	- 1%
Acceptable Use Policies	96%	99%	3%	100%	100%	0%
25. Percent of districts providing training for the use of the Louisiana Department of Education's Making Connections Web site.	48%	68%	20%	43%	57%	14%
* Total exceeds 100% due to multiple responses						

State Requirements - Long Range Planning

26. Percent of districts that have a technology plan.	99%	100%	1%	100%	100%	0%
<u>Technology plan written for</u>						
1 year	3%	4%	1%	0%	0%	0%
2 - 4 years	41%	36%	- 5%	71%	57%	- 14%
5 or more years	56%	60%	4%	29%	43%	14%
<u>Technology plan last reviewed</u>						
1997	23%	6%	- 17%	0%	0%	0%
1998	6%	1%	- 1%	0%	0%	0%
1999	64%	15%	- 49%	57%	14%	- 43%
2000	23%	56%	33%	43%	43%	0%
2001	*	22%	22%	*	43%	43%
<u>Technology plan last revised</u>						
1997	13%	10%		0%	0%	
1998	9%	6%	- 3%	29%	0%	0%
1999	55%	19%	- 3%	29%	29%	- 29%
2000	23%	1%	- 36%	42%	0%	0%
2001	*	21%	- 22%	*	57%	- 42%
			21%			57%
<u>Technology plan provides for staff training in: *</u>						
Software licensing	71%	78%		57%	57%	
Copyright laws and issues	65%	75%	7%	43%	43%	0%
Internet Filtering	69%	82%	10%	43%	43%	0%
Acceptable Use Policies	96%	100%	13%	86%	86%	0%
			4%			0%
26e. Percent of districts addressing each of the following components in their district technology plans. *						
Hardware/peripherals	92%	96%	4%	100%	100%	0%
Computer Software	96%	99%	3%	100%	100%	0%
Internal Connections	87%	90%	3%	43%	43%	0%
Review Requirement	85%	86%	1%	100%	100%	0%
Staff Training	93%	96%	3%	100%	100%	0%
Curriculum Integration	89%	93%	4%	100%	100%	0%
Maintenance of Equipment	85%	86%	1%	85%	71%	- 14%
External Connections	69%	74%	5%	0%	0%	0%
Electrical Wiring	71%	76%	5%	29%	29%	0%
Personnel for Technical Assistance	79%	85%	6%	43%	43%	0%
Personnel for the Integration for Technology	75%	82%	7%	72%	71%	- 1%
* Total exceeds 100% due to multiple responses						

27. Percent of districts using each type of funding for technology (multiple responses allowed): *						
District Line Item Budget	65%	74%	9%	29%	29%	0%
Site Based Line Item Budget	34%	38%	4%	86%	86%	0%
Capital Funds	20%	19%	- 1%	14%	14%	0%
Loan(s)	3%	3%	0%	0%	0%	0%
Local Bonds	20%	21%	1%	0%	0%	0%
State Funds	90%	97%	7%	86%	100%	14%
State Bonds	6%	1%	- 5%	0%	0%	0%
Federal Funds	92%	94%	2%	86%	86%	0%
Grants	97%	100%	- 3%	100%	100%	0%
Vendor Contributions	24%	28%	4%	28%	29%	0%
Other	34%	43%	9%	0%	0%	1%
						0%
28. Total amounts budgeted in district budgets:						
Computer Hardware/Peripherals	\$20,837,202	\$19,765,609	\$1,071,593	\$14,118,800	\$ 553,083	-\$13,565,717
Software	\$ 6,492,570	\$ 4,412,470	\$2,080,100	\$ 294,851	\$ 264,229	- \$ 30,622
Professional Development	\$ 5,932,862	\$ 5,753,993	\$ 178,869	\$ 186,811	\$ 142,052	- \$ 44,759
Telecommunications (Internet, Long Distance, etc.)	\$ 6,683,033	\$ 7,475,028	\$ 791,995	\$ 64,454	\$ 63,588	\$ 886
Networks	\$10,578,755	\$12,521,763	\$1,943,008	\$ 108,327	\$ 50,001	- \$ 58,326
Distance Learning (Cable TV, Satellite, etc.)	\$ 363,513	\$ 723,393	\$ 359,880	\$0	\$0	\$0
Service/Support	\$ 8,923,703	\$ 8,832,402	\$ 91,301	\$ 51,000	\$ 17,475	- \$ 33,525
Other (including supplies)	\$ 4,861,320	\$ 5,646,782	\$ 785,462	\$ 5,300	\$ 4,331	\$ 969
Total District Technology Budgets	\$64,672,958	\$65,131,440	\$ 458,482	\$ 2,122,623	\$1,094,759	- \$ 1,027,864
29. Average number for each factor influencing the selection of schools that receive or benefit from CBTF or TLCF funds, (1 = Highest priority and 8 = lowest priority).						
Low Socio-economic Area	4.2	**	**	2.4	**	**
School Performance Scores	2.7	**	**	4.0	**	**
Teacher Interest	5.1	**	**	4.4	**	**
Collaboration with Other Grants (8g, NSF, etc.)	5.9	**	**	4.6	**	**
Administrative Support in the School	5.1	**	**	4.4	**	**
Teacher Training and Experience with Technology	5.5	**	**	5.1	**	**
State Testing Programs (LEAP, CRT)	2.8	**	**	6.9	**	**
Amount of Technology in the School	4.7	**	**	4.1	**	**
30. Percent of districts that made provisions to include the K-12 Technology Guidelines in staff development sessions.	72%	85%	13%	28%	100%	72%

* Total exceeds 100% due to multiple responses.

** Data not available

31. Percent of districts having technology proficiency requirements for students to matriculate to the next level	9%	8%	- 1%	43%	43%	0%
32. Percent of districts that are making provisions to encourage and include minority participation in staff development and other educational technology activities	80%	85%	5%	100%	100%	0%
33. Percent of districts that applied for the E-rate discount.	90%	93%	3%	43%	43%	0%
33a. Value of the E-rate discount for all districts	\$33,833,413	\$48,443,677	\$14,610,264	\$184,296	\$171,699	- \$ 12,597
Total value for all districts						

APPENDIX N

Four National Pillars – Mean Scores

Appendix N

cc Four National Pillars – Mean Scores

Table 6 Means of Districts/Schools Fulfilling the Four National Pillars			
Pillar/Goal	1999	2000	2001
1. All <i>teachers</i> in the nation will have the training and support they need to help all students learn through computers and through the information superhighway. 1 = No members of teaching workforce participating in ongoing training & receiving support. 3 = Half of the teaching workforce participating in ongoing training & receiving support 5 = Entire teaching workforce participating in ongoing training & receiving support	3.21	3.28	3.34
2. All teachers and students will have modern multimedia computers in their classrooms. 1 = All classrooms with a student to multi-media computer ratio greater than 21:1 3 = All classrooms with a student to multi-media computer ratio of 13:1 5= All classrooms with a student to multi-media computer ratio at or less than 5:1	2.85	3.66	3.70
3. Every <i>classroom</i> will be connected to the information superhighway. 1 = Less than 14% of classrooms connected to the information superhighway. 3 = 55% of classrooms connected to the information superhighway. 5 = All of classrooms connected to the information superhighway.	3.69	4.06	4.16
4. Effective and engaging software and on-line learning resources will be an integral part of the school's curriculum. 1 = Effective and engaging software and on-line learning resources not in use in any core content areas. 3= Effective and engaging software and on-line learning resources in use in half of the core content areas. 5 = Effective and engaging software and on-line learning resources in use in all core content areas.	3.11	3.49	3.53

Appendix N

**EOY Report-Progress Toward Four Pillars
Computation of Percentages 2000-2001
Districts and State Schools**

Public												
	Goal 1			Goal 2			Goal 3			Goal 4		
100 =5	100			5:1			100%			100 %		
90 = 4.66												
80 = 4.33												
75 =4				9:1				4.16	77%			
70 = 3.66					3.70	10:1					3.53	67%
60 = 3.33		3.34	61%									
50 =3	50			13:1			55%			50%		
40												
30												
25 =2												
20												
10												
0 =1	0			21:1			>14%			0		

EXECUTIVE SUMMARY

The Louisiana Technology Initiative expended approximately \$27,149,355 on technology and staff development in public and non-public schools during the 1999-2000 school year. Of this amount, \$17,107,593 came from the Classroom Based Technology Fund (CBTF) and \$10,592,272 from the Technology Literacy Challenge Fund (TLCF). The CBT funds were further divided, with \$14,045,733 allocated directly to public schools, approximately \$46,808 going to state special schools, \$2,968,031 awarded to non-public schools. From the TLCF \$4,197,620 awarded as Professional Development Grants to consortia of districts and/or Dioceses and universities. Four new Teaching, Learning, and Technology Centers were funded with these grants, making a total of nine TLTC centers that serve as regional extensions of LCET for training. Five percent of the \$10,592,272 TLCF funds received from the USDE, approximately \$529,614, was used for state level activities, mainly at the Louisiana Center for Educational Technology.

CBTF funds were distributed to districts and schools using an RFP procedure with allocations based on a per pupil basis. TLCF funds were competitively awarded to all districts based on high poverty need. Proposals were developed based on district/school technology plans that were approved by the state and which addressed the State Technology Goal and the four National Goals. Funds were primarily used for developing technology-rich instructional rooms, connecting to the Internet, purchasing software and computer peripherals, and conducting professional development activities. The professional development activities emphasized the integration of technology into curricula, aligning curriculum to state content standards through technology, and most were based on the LA INTECH model developed by the LCET staff.

In June 2000, the student to computer ratio for public schools was 5.5:1, when considering all types of computers. The state has reduced the ratio from 8:1 in 1997, and brought it very close to the National goal of 5 students to each computer. For the non-public schools the ratio was 6.3:1. When only high-end computers are considered, the ratio is 8.2:1 for public and 8.5:1 for non-public schools. The state has made remarkable progress in this area, decreasing the ratio from 48:1 for both public and non-public schools in 1997.

The percentage of computers with Internet access increased in 2000 to 54% from 49% in 1999 for public and to 69% from 61% for non-public schools. Ninety-four percent (94%) of the public schools and 97% of the non-public schools now have Internet access, almost doubling the rates in 1997. Internet connections via direct link increased from 76% to 91% for public and from 61% to 77% for non-public schools this year.

The percentage of public school teachers at the beginner level in using technology has dropped from 41% in 1999 to 33% in 2000; non-public beginners dropped from 37% to 24%. The intermediate levels of 41% and 37% respectively showed small gains, but advanced and instructor percentage levels dropped in both categories compared to last year. Concerning training and support for teachers, 91% of public and 87% of non-public schools reported having a person responsible for supporting teachers and assisting them

with the integration of technology into the curriculum. The same percentages of schools, 91% public and 87% non-public, have a person who helps to maintain and support hardware and software in the schools. Sixty-three percent (63%) of public and 53% of non-public schools are now requiring that teachers demonstrate technology skills for employment at their schools.

Data show that 1,343 professional development sessions were presented in Louisiana involving 12,755 participants, of which 10,837 were teachers. Sessions were in the categories of: LA INTECH, Integration of Technology, Application Software/Skills Training, Technical Support Training, and Administrative Training/Issues. Ratings on the overall effectiveness of training sessions on a scale of 5 to 1, (5= Excellent and 1= Did not meet expectations) provided mean scores of 4.64 for public school teachers and 4.68 for non-public school teachers, indicating that participants were very pleased with the training sessions. LA INTECH, the state model for integrating technology into standards-based lessons, accommodated 2,081 public and 132 non-public school teachers. Each participant was trained to redeliver the model at the local level, and the standards-based lessons they developed were posted on LCET and TLTC Web pages. Courses for university credit were taken by 497 participants.

All districts in the state, 86% of public schools, and 93% of non-public schools have long-range technology plans. This year 63% of public districts and 73% of dioceses and non-public schools have revised their plans. Goals were increasingly targeted at student achievement, and are beginning to connect school accountability and reform to the technology initiative.

Local efforts for installing technology infrastructure and training educators to use it effectively to improve student achievement is quite evident in school and district technology budgets. Public schools budgeted a total of \$4,349,286.39 for technology, which included computer hardware and other peripherals, software, professional development, telecommunications, networking, distance learning, and service and support. Non- public schools budgeted \$4,685,049.11 for technology. At the district levels, public school technology budgets totaled \$64,672,958 and non-publics totaled \$2,122,623. In addition, technology coordinators reported the dollar value of their E-rate discounts to be \$33,833,413 for the 1999-2000 school year.

The Louisiana Technology Initiative for 1999-2000 has demonstrated a significant gain compared to previous years. In the first three years, the Initiative was very successful in placing technology into classrooms, and providing rich resources and basic introductory training for faculties and staffs. In this fourth year, tremendous gains have been made in professional development of all educators for integrating technology into curricula and for using that training as a reform agent for all teaching and learning in Louisiana. State accountability plan measures, especially student achievement scores, appeared in plans and goals more than ever before, indicating that many districts and schools have the hardware and trained personnel in place, and are now focusing of real changes in teaching and improvements in student performances.

The Governor, Legislature, Board of Elementary and Secondary Education, Louisiana Department of Education, Louisiana Center for Educational Technology and participating businesses and industry are to be applauded for their vision, leadership, funding, and active support of this Initiative. The school children of Louisiana are the benefactors of this continuing program, and in subsequent years, the State at large. In order for this Initiative to support the State Accountability Plan, the stakeholders must continue to fund purchases of hardware and software, provide facilities, opportunities and funding for professional development and ensure that universities provide pre-service teacher education programs and partnerships with practicing teachers that ensure appropriate content area knowledge and skills to integrate technology into the curricula.

	Responses	Value	Mean
a	11,659	58,295	0.8177049
b	2,094	8,376	
c	1,479	4,437	
d	81	162	
f	21	21	
TOTAL	15,334	71,291	

Mean Scores for Four Pillars					
	Pillar 1	Pillar 2	Pillar 3	Pillar 4	

Rating	1999	2000	2001	1999	2000	2001	1999	2000	2001	1999	2000	2001
1	3.9 0											
2												
3												
4												
5												